

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: May 3, 2004, 10:16:20 ; Search time 41 Seconds  
(without alignments)  
3.657 Million cell updates/sec

Title: us-10-017-621-3

Perfect score: 1745

Sequence: 1 tggagcagcgttaagatg.....gttcacactgccactgtgcc 1745

Scoring table:

IDENTITY\_NUC

Gapop 10.0 , Gapext 0.5

Searched: 2172 seqs, 42957 residues

Total number of hits satisfying chosen parameters: 4344

Minimum DB seq length: 8

Maximum DB seq length: 50

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 2195 summaries

Database : rng.seq.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

| Result No. | Score | Query Match | Length | ID         | Description        |
|------------|-------|-------------|--------|------------|--------------------|
| 1          | 22.4  | 1.3         | 33     | 1 ABA04099 | Human Cdk5 related |
| 2          | 22.4  | 1.3         | 33     | 1 ABA04100 | Human Cdk5 related |
| 3          | 22    | 1.3         | 22     | 1 AAL61693 | Human PCTAIRE prot |
| 4          | 22    | 1.3         | 31     | 1 AAI30264 | Human single nucle |
| 5          | 21.4  | 1.2         | 31     | 1 AAI29606 | Human single nucle |
| 6          | 21    | 1.2         | 21     | 1 AAH62195 | PCTAIRE-1 polymorp |
| 7          | 20    | 1.1         | 20     | 1 AAL61700 | Human PCTAIRE prot |
| 8          | 20    | 1.1         | 20     | 1 AAL61714 | Human PCTAIRE prot |
| 9          | 20    | 1.1         | 20     | 1 AAL61720 | Human PCTAIRE prot |
| 10         | 20    | 1.1         | 20     | 1 AAL61749 | Human PCTAIRE prot |
| 11         | 20    | 1.1         | 20     | 1 AAL61759 | Human PCTAIRE prot |
| 12         | 20    | 1.1         | 20     | 1 AAL61767 | Human PCTAIRE prot |
| 13         | 20    | 1.1         | 20     | 1 AAL61772 | Human PCTAIRE prot |
| 14         | 20    | 1.1         | 20     | 1 AAL61773 | Human PCTAIRE prot |
| 15         | 20    | 1.1         | 20     | 1 AAL61706 | Human PCTAIRE prot |
| 16         | 20    | 1.1         | 20     | 1 AAL61727 | Human PCTAIRE prot |
| 17         | 20    | 1.1         | 20     | 1 AAL61737 | Human PCTAIRE prot |
| 18         | 20    | 1.1         | 20     | 1 AAL61754 | Human PCTAIRE prot |
| 19         | 20    | 1.1         | 20     | 1 AAL61754 | Human PCTAIRE prot |
| 20         | 20    | 1.1         | 20     | 1 AAL61756 | Human PCTAIRE prot |
| 21         | 20    | 1.1         | 20     | 1 AAL61765 | Human PCTAIRE prot |
| 22         | 20    | 1.1         | 20     | 1 AAL61768 | Human PCTAIRE prot |
| 23         | 20    | 1.1         | 20     | 1 AAL61728 | Human PCTAIRE prot |
| 24         | 20    | 1.1         | 20     | 1 AAL61728 | Human PCTAIRE prot |
| 25         | 20    | 1.1         | 20     | 1 AAL61753 | Human PCTAIRE prot |
| 26         | 20    | 1.1         | 20     | 1 AAL61758 | Human PCTAIRE prot |
| 27         | 20    | 1.1         | 20     | 1 AAL61770 | Human PCTAIRE prot |
| 28         | 20    | 1.1         | 20     | 1 AAL61715 | Human PCTAIRE prot |
| 29         | 20    | 1.1         | 20     | 1 AAL61732 | Human PCTAIRE prot |
| 30         | 20    | 1.1         | 20     | 1 AAL61745 | Human PCTAIRE prot |
| 31         | 20    | 1.1         | 20     | 1 AAL61757 | Human PCTAIRE prot |
| 32         | 20    | 1.1         | 20     | 1 AAL61764 | Human PCTAIRE prot |
| 33         | 20    | 1.1         | 20     | 1 AAL61726 | Human PCTAIRE prot |

|       |      |     |    |   |          |                     |
|-------|------|-----|----|---|----------|---------------------|
| c 34  | 20   | 1.1 | 20 | 1 | AAL61740 | Human PCTAIRE prot  |
| c 35  | 20   | 1.1 | 20 | 1 | AAL61741 | Human PCTAIRE prot  |
| c 36  | 20   | 1.1 | 20 | 1 | AAL61760 | Human PCTAIRE prot  |
| c 37  | 20   | 1.1 | 20 | 1 | AAL61771 | Human PCTAIRE prot  |
| c 38  | 20   | 1.1 | 20 | 1 | AAL61704 | Human PCTAIRE prot  |
| c 39  | 20   | 1.1 | 20 | 1 | AAL61707 | Human PCTAIRE prot  |
| c 40  | 20   | 1.1 | 20 | 1 | AAL61724 | Human PCTAIRE prot  |
| c 41  | 20   | 1.1 | 20 | 1 | AAL61729 | Human PCTAIRE prot  |
| c 42  | 20   | 1.1 | 20 | 1 | AAL61755 | Human PCTAIRE prot  |
| c 43  | 20   | 1.1 | 20 | 1 | AAL61748 | Human PCTAIRE prot  |
| c 44  | 20   | 1.1 | 20 | 1 | AAL61701 | Human PCTAIRE prot  |
| c 45  | 20   | 1.1 | 20 | 1 | AAL61723 | Human PCTAIRE prot  |
| c 46  | 20   | 1.1 | 20 | 1 | AAL61733 | Human PCTAIRE prot  |
| c 47  | 20   | 1.1 | 20 | 1 | AAL61734 | Human PCTAIRE prot  |
| c 48  | 20   | 1.1 | 20 | 1 | AAL61739 | Human PCTAIRE prot  |
| c 49  | 20   | 1.1 | 20 | 1 | AAL61786 | Human PCTAIRE prot  |
| c 50  | 20   | 1.1 | 20 | 1 | AAL61702 | Human PCTAIRE prot  |
| c 51  | 20   | 1.1 | 20 | 1 | AAL61705 | Human PCTAIRE prot  |
| c 52  | 20   | 1.1 | 20 | 1 | AAL61712 | Human PCTAIRE prot  |
| c 53  | 20   | 1.1 | 20 | 1 | AAL61736 | Human PCTAIRE prot  |
| c 54  | 20   | 1.1 | 20 | 1 | AAL61747 | Human PCTAIRE prot  |
| c 55  | 20   | 1.1 | 20 | 1 | AAL61761 | Human PCTAIRE prot  |
| c 56  | 20   | 1.1 | 20 | 1 | AAL61710 | Human PCTAIRE prot  |
| c 57  | 20   | 1.1 | 20 | 1 | AAL61742 | Human PCTAIRE prot  |
| c 58  | 20   | 1.1 | 20 | 1 | AAL61698 | Human PCTAIRE prot  |
| c 59  | 20   | 1.1 | 20 | 1 | AAL61699 | Human PCTAIRE prot  |
| c 60  | 20   | 1.1 | 20 | 1 | AAL61709 | Human PCTAIRE prot  |
| c 61  | 20   | 1.1 | 20 | 1 | AAL61721 | Human PCTAIRE prot  |
| c 62  | 20   | 1.1 | 20 | 1 | AAL61735 | Human PCTAIRE prot  |
| c 63  | 20   | 1.1 | 20 | 1 | AAL61746 | Human PCTAIRE prot  |
| c 64  | 20   | 1.1 | 20 | 1 | AAL61763 | Human PCTAIRE prot  |
| c 65  | 20   | 1.1 | 20 | 1 | AAL61730 | Human PCTAIRE prot  |
| c 66  | 20   | 1.1 | 20 | 1 | AAL61731 | Human PCTAIRE prot  |
| c 67  | 20   | 1.1 | 20 | 1 | AAL61751 | Human PCTAIRE prot  |
| c 68  | 20   | 1.1 | 20 | 1 | AAL61752 | Human PCTAIRE prot  |
| c 69  | 20   | 1.1 | 20 | 1 | AAL61775 | Human PCTAIRE prot  |
| c 70  | 20   | 1.1 | 20 | 1 | AAL61708 | Human PCTAIRE prot  |
| c 71  | 20   | 1.1 | 20 | 1 | AAL61717 | Human PCTAIRE prot  |
| c 72  | 20   | 1.1 | 20 | 1 | AAL61722 | Human PCTAIRE prot  |
| c 73  | 20   | 1.1 | 20 | 1 | AAL61725 | Human PCTAIRE prot  |
| c 74  | 20   | 1.1 | 20 | 1 | AAL61744 | Human PCTAIRE prot  |
| c 75  | 20   | 1.1 | 20 | 1 | AAL61762 | Human PCTAIRE prot  |
| c 76  | 20   | 1.1 | 20 | 1 | AAL61703 | Human PCTAIRE prot  |
| c 77  | 20   | 1.1 | 20 | 1 | AAL61711 | Human PCTAIRE prot  |
| c 78  | 20   | 1.1 | 20 | 1 | AAL61716 | Human PCTAIRE prot  |
| c 79  | 20   | 1.1 | 20 | 1 | AAL61719 | Human PCTAIRE prot  |
| c 80  | 20   | 1.1 | 20 | 1 | AAL61769 | Human PCTAIRE prot  |
| c 81  | 20   | 1.1 | 20 | 1 | AAL61774 | Human PCTAIRE prot  |
| c 82  | 20   | 1.1 | 20 | 1 | AAL61713 | Human PCTAIRE prot  |
| c 83  | 20   | 1.1 | 20 | 1 | AAL61738 | Human PCTAIRE prot  |
| c 84  | 20   | 1.1 | 20 | 1 | AAL61743 | Human PCTAIRE prot  |
| c 85  | 19.2 | 1.1 | 25 | 1 | ACI51216 | Human microarray D  |
| c 86  | 19.2 | 1.1 | 25 | 1 | ACI51217 | Human microarray D  |
| c 87  | 19.2 | 1.1 | 29 | 1 | AAZ29517 | Primer-2 for ident  |
| c 88  | 19   | 1.1 | 19 | 1 | AAA82879 | cdk4 ribozyme bind  |
| c 89  | 19   | 1.1 | 19 | 1 | AAA82878 | cdk4 ribozyme bind  |
| c 90  | 19   | 1.1 | 19 | 1 | AAH58041 | Cell-cycle depende  |
| c 91  | 19   | 1.1 | 19 | 1 | AAH58040 | Cell-cycle depende  |
| c 92  | 19   | 1.1 | 19 | 1 | AAH58040 | Human PCTAIRE prot  |
| c 93  | 18.8 | 1.1 | 25 | 1 | ACI39577 | Human microarray D  |
| c 94  | 18.8 | 1.1 | 28 | 1 | ABT04565 | Human ALDH3 gene p  |
| c 95  | 18.6 | 1.1 | 25 | 1 | ABN15303 | Human GMPL-1 25-m   |
| c 96  | 18.6 | 1.1 | 25 | 1 | ABV82335 | Human HTPL scannin  |
| c 97  | 18.6 | 1.1 | 25 | 1 | ABV82336 | Human HTPL scannin  |
| c 98  | 18.6 | 1.1 | 25 | 1 | ACK02038 | Human microarray D  |
| c 99  | 18.6 | 1.1 | 27 | 1 | ABA99028 | Human mammary gland |
| c 100 | 18.2 | 1.0 | 27 | 1 | ABT03768 | Human SHH gene PCR  |
| c 101 | 17.8 | 1.0 | 24 | 1 | AAV21840 | Nuclease resistant  |
| c 102 | 17.6 | 1.0 | 25 | 1 | AAV05313 | Kinase domain 5' P  |
| c 103 | 17.6 | 1.0 | 25 | 1 | ABN15302 | Human GMPL-1 25-m   |
| c 104 | 17.6 | 1.0 | 25 | 1 | ABN15304 | Human GMPL-1 25-m   |
| c 105 | 17.6 | 1.0 | 25 | 1 | ABV82337 | Human HTPL scannin  |
| c 106 | 17.6 | 1.0 | 25 | 1 | ABV82334 | Human HTPL scannin  |

|       |      |     |    |   |           |                     |       |      |     |    |   |          |                    |
|-------|------|-----|----|---|-----------|---------------------|-------|------|-----|----|---|----------|--------------------|
| C 107 | 17.6 | 1.0 | 25 | 1 | ACK27269  | Human microarray D  | 180   | 16.2 | 0.9 | 24 | 1 | ABA2542  | Znax1 gene region  |
| C 108 | 17.6 | 1.0 | 25 | 1 | ACI93994  | Human microarray D  | C 181 | 16.2 | 0.9 | 24 | 1 | ABS55758 | Human p70 ribosome |
| C 109 | 17.6 | 1.0 | 26 | 1 | ABK66872  | Human gene specific | C 182 | 16.2 | 0.9 | 24 | 1 | ABK33339 | Human Znax1 cDNA f |
| C 110 | 17.6 | 1.0 | 26 | 1 | ABX17595  | RTQ-PCR probe #2 f  | C 183 | 16.2 | 0.9 | 24 | 1 | ACD45922 | Human HEM SRS mark |
| C 111 | 17.4 | 1.0 | 19 | 1 | AAA82761  | cdk3 ribozyme bind  | C 184 | 16.2 | 0.9 | 24 | 1 | ADB98620 | Sequence tagged si |
| C 112 | 17.4 | 1.0 | 19 | 1 | AAA82765  | cdk3 ribozyme bind  | C 185 | 16   | 0.9 | 24 | 1 | AAT67065 | soluble type I ins |
| C 113 | 17.4 | 1.0 | 19 | 1 | AAH57919  | Cell-cycle depende  | C 186 | 16   | 0.9 | 24 | 1 | AAK31942 | Primer C used in t |
| C 114 | 17.4 | 1.0 | 19 | 1 | AAH57923  | Cell-cycle depende  | C 187 | 16   | 0.9 | 24 | 1 | ABL14245 | Human neurogulin 5 |
| C 115 | 17.2 | 1.0 | 20 | 1 | ACI39576  | Human microarray D  | C 188 | 16   | 0.9 | 24 | 1 | ABI83145 | Capture oligonucle |
| C 116 | 17.2 | 1.0 | 20 | 1 | AAK29342  | Chemically modifie  | C 189 | 16   | 0.9 | 24 | 1 | ABI92410 | Capture oligonucle |
| C 117 | 17   | 1.0 | 20 | 1 | AAK29331  | JNK2-specific prob  | C 190 | 16   | 0.9 | 24 | 1 | ABI83144 | Capture oligonucle |
| C 118 | 17   | 1.0 | 20 | 1 | AAK48651  | Antisense oligonuc  | C 191 | 16   | 0.9 | 24 | 1 | ABI92411 | cdk7 ribozyme bind |
| C 119 | 17   | 1.0 | 20 | 1 | AAK48651  | Antisense oligonuc  | C 192 | 15.8 | 0.9 | 19 | 1 | AAA83175 | cdk7 ribozyme bind |
| C 120 | 17   | 1.0 | 20 | 1 | AAK62885  | JNK1 antisense olig | C 193 | 15.8 | 0.9 | 19 | 1 | AAA83175 | cdk7 ribozyme bind |
| C 121 | 17   | 1.0 | 20 | 1 | AAK62874  | JNK1 antisense olig | C 194 | 15.8 | 0.9 | 19 | 1 | AAA83174 | cdk7 ribozyme bind |
| C 122 | 17   | 1.0 | 20 | 1 | AAH23754  | Immunostimulatory   | C 195 | 15.8 | 0.9 | 19 | 1 | AAH59469 | Cyclin D2 ribozyme |
| C 123 | 17   | 1.0 | 20 | 1 | AAK62874  | Immunostimulatory   | C 196 | 15.8 | 0.9 | 19 | 1 | AAH58336 | Cell-cycle depende |
| C 124 | 17   | 1.0 | 20 | 1 | AAK62874  | Immunostimulatory   | C 197 | 15.8 | 0.9 | 19 | 1 | AAH58337 | Cell-cycle depende |
| C 125 | 17   | 1.0 | 20 | 1 | ADL35057  | Human JNK2 sense c  | C 198 | 15.8 | 0.9 | 19 | 1 | AAH58338 | Cell-cycle depende |
| C 126 | 17   | 1.0 | 20 | 1 | ADA26578  | Human Jun N-termin  | C 199 | 15.8 | 0.9 | 19 | 1 | AAH58339 | Cell-cycle depende |
| C 127 | 17   | 1.0 | 20 | 1 | ADG93615  | Immunostimulatory   | C 200 | 15.8 | 0.9 | 20 | 1 | AAA65612 | Dog genomic marker |
| C 128 | 17   | 1.0 | 20 | 1 | ACB36685  | Immunostimulatory   | C 201 | 15.8 | 0.9 | 20 | 1 | AAA65624 | Dog genomic marker |
| C 129 | 17   | 1.0 | 25 | 1 | AAZ36748  | PCR primer used to  | C 202 | 15.8 | 0.9 | 20 | 1 | AAF72934 | Human daxx inhibit |
| C 130 | 17   | 1.0 | 25 | 1 | ADB03815  | Human MDZ7 scannin  | C 203 | 15.8 | 0.9 | 20 | 1 | ABQ74636 | Human daxx inhibit |
| C 131 | 17   | 1.0 | 25 | 1 | ADB03816  | Human MDZ7 scannin  | C 204 | 15.8 | 0.9 | 20 | 1 | ABZ90928 | CDC2 gene antisens |
| C 132 | 17   | 1.0 | 25 | 1 | ADB03814  | Human MDZ7 scannin  | C 205 | 15.8 | 0.9 | 20 | 1 | ABZ98911 | Human oligonucleot |
| C 133 | 17   | 1.0 | 25 | 1 | ACI48161  | Human microarray D  | C 206 | 15.8 | 0.9 | 20 | 1 | ABZ86780 | Human oligonucleot |
| C 134 | 17   | 1.0 | 25 | 1 | ACK02039  | Human microarray D  | C 207 | 15.8 | 0.9 | 20 | 1 | AAF97316 | Human gene single  |
| C 135 | 17   | 1.0 | 25 | 1 | ACK28727  | Human microarray D  | C 208 | 15.8 | 0.9 | 21 | 1 | AAH62395 | NPE2L1 polymorphis |
| C 136 | 17   | 1.0 | 26 | 1 | ABA99030  | Human mammary glan  | C 209 | 15.8 | 0.9 | 22 | 1 | AAH62395 | Human NOVX DNA PCR |
| C 137 | 17   | 1.0 | 26 | 1 | ABS64424  | Human NOVX probe A  | C 210 | 15.8 | 0.9 | 22 | 1 | AAH72455 | Human NOVX DNA PCR |
| C 138 | 16.8 | 1.0 | 20 | 1 | AD62208   | Human, haematopoiet | C 211 | 15.8 | 0.9 | 23 | 1 | ABV74599 | Forward primer use |
| C 139 | 16.8 | 1.0 | 21 | 1 | AAK94989  | Primer 3 for sequ   | C 212 | 15.8 | 0.9 | 24 | 1 | ABV74591 | Human ribosomal pr |
| C 140 | 16.8 | 1.0 | 21 | 1 | AAK95004  | Primer for sequ     | C 213 | 15.6 | 0.9 | 24 | 1 | ABL55122 | Human Myb protein  |
| C 141 | 16.8 | 1.0 | 21 | 1 | AAA90553  | HLA class I gene s  | C 214 | 15.6 | 0.9 | 22 | 1 | AAZ56474 | Human G-protein co |
| C 142 | 16.8 | 1.0 | 21 | 1 | AAA90559  | HLA class I gene s  | C 215 | 15.6 | 0.9 | 22 | 1 | ABS59078 | Vascular endotheli |
| C 143 | 16.6 | 1.0 | 23 | 1 | AAQ62402  | Vector pVAC1 const  | C 216 | 15.6 | 0.9 | 23 | 1 | AAQ37360 | Human G-protein co |
| C 144 | 16.6 | 1.0 | 23 | 1 | AAK23985  | Human hGT1 PCR pri  | C 217 | 15.6 | 0.9 | 23 | 1 | AAQ37359 | Probe for Streptoc |
| C 145 | 16.6 | 1.0 | 23 | 1 | AAA98718  | L. mexicana kinase  | C 218 | 15.6 | 0.9 | 23 | 1 | AAK02161 | Human IVS17 3'-acc |
| C 146 | 16.6 | 1.0 | 23 | 1 | ACF05113  | Retroviral vector   | C 219 | 15.6 | 0.9 | 24 | 1 | AAH40717 | SNP specific upper |
| C 147 | 16.6 | 1.0 | 24 | 1 | AAA07024  | KSR PCR primer SE   | C 220 | 15.6 | 0.9 | 24 | 1 | ABS54362 | Mucor circinelloid |
| C 148 | 16.6 | 1.0 | 24 | 1 | ABK64165  | Primer #105. Homo   | C 221 | 15.6 | 0.9 | 24 | 1 | ABK90912 | Fruit fly LRR47 po |
| C 149 | 16.6 | 1.0 | 24 | 1 | ADC10518  | Human NOVX polyep   | C 222 | 15.6 | 0.9 | 24 | 1 | ABQ10087 | Oligonucleotide ad |
| C 150 | 16.6 | 1.0 | 24 | 1 | AAD60939  | BS1015 PCR primer   | C 223 | 15.6 | 0.9 | 24 | 1 | ABQ10128 | Oligonucleotide ad |
| C 151 | 16.6 | 1.0 | 25 | 1 | AAH39887  | SNP specific SNPE   | C 224 | 15.6 | 0.9 | 24 | 1 | AQK03115 | Oligonucleotide ad |
| C 152 | 16.6 | 1.0 | 25 | 1 | ABN15301  | Human GDMPL-1 25-m  | C 225 | 15.6 | 0.9 | 24 | 1 | ABI84591 | Capture oligonucle |
| C 153 | 16.6 | 1.0 | 25 | 1 | ABN15305  | Human GDMPL-1 25-m  | C 226 | 15.6 | 0.9 | 24 | 1 | ABI82867 | Capture oligonucle |
| C 154 | 16.6 | 1.0 | 25 | 1 | ABV82333  | Human HTPL scannin  | C 227 | 15.6 | 0.9 | 24 | 1 | ABI92132 | Capture oligonucle |
| C 155 | 16.6 | 1.0 | 25 | 1 | ABV82338  | Human HTPL scannin  | C 228 | 15.6 | 0.9 | 24 | 1 | ABI82866 | Capture oligonucle |
| C 156 | 16.6 | 1.0 | 25 | 1 | ABS75865  | Human PAPP-Ea asso  | C 229 | 15.6 | 0.9 | 24 | 1 | ABK19257 | Capture oligonucle |
| C 157 | 16.6 | 1.0 | 25 | 1 | ABS75866  | Human PAPP-Ea asso  | C 230 | 15.4 | 0.9 | 17 | 1 | ABS75018 | Human ERG Amberzym |
| C 158 | 16.6 | 1.0 | 25 | 1 | ABS75867  | Human PAPP-Ea asso  | C 231 | 15.4 | 0.9 | 17 | 1 | ABK57128 | Human PAPP-Ea asso |
| C 159 | 16.6 | 1.0 | 25 | 1 | ACI91063  | Human microarray D  | C 232 | 15.4 | 0.9 | 17 | 1 | ACC65856 | Human CLCA1 gene e |
| C 160 | 16.6 | 1.0 | 25 | 1 | ACI47780  | Human microarray D  | C 233 | 15.4 | 0.9 | 19 | 1 | AAH82722 | Murine oligonucleo |
| C 161 | 16.6 | 1.0 | 25 | 1 | ACI51208  | Human microarray D  | C 234 | 15.4 | 0.9 | 19 | 1 | AAH82722 | Human Ty protease  |
| C 162 | 16.6 | 1.0 | 25 | 1 | ACH62897  | DNA target sequenc  | C 235 | 15.4 | 0.9 | 19 | 1 | AAH82722 | cdk3 ribozyme bind |
| C 163 | 16.4 | 0.9 | 18 | 1 | AAH60744  | Primer #2 for huma  | C 236 | 15.4 | 0.9 | 19 | 1 | AAH57884 | Cell-cycle depende |
| C 164 | 16.4 | 0.9 | 19 | 1 | AAH82762  | cdk3 ribozyme bind  | C 237 | 15.4 | 0.9 | 19 | 1 | AAH57884 | Cell-cycle depende |
| C 165 | 16.4 | 0.9 | 19 | 1 | AAH57924  | Cell-cycle depende  | C 238 | 15.4 | 0.9 | 19 | 1 | ADZ29583 | Mitogen activated  |
| C 166 | 16.4 | 0.9 | 20 | 1 | AAZ18127  | STK 3 gene specifi  | C 239 | 15.4 | 0.9 | 20 | 1 | ACF03629 | Mitogen activated  |
| C 167 | 16.4 | 0.9 | 20 | 1 | AAZ18155  | STK 17 gene specifi | C 240 | 15.4 | 0.9 | 20 | 1 | AAH62434 | Tyrosine kinase ge |
| C 168 | 16.4 | 0.9 | 20 | 1 | AAZ18141  | STK 10 gene specifi | C 241 | 15.4 | 0.9 | 20 | 1 | ADD18363 | Human NOV4b revers |
| C 169 | 16.4 | 0.9 | 20 | 1 | AAZ18411  | Human oligonucleot  | C 242 | 15.4 | 0.9 | 20 | 1 | AAH62434 | Human ABC transpor |
| C 170 | 16.4 | 0.9 | 20 | 1 | ABZ93276  | Human androgen rec  | C 243 | 15.4 | 0.9 | 20 | 1 | ADD18363 | Human MOL protein  |
| C 171 | 16.4 | 0.9 | 24 | 1 | ACI30434  | Human microarray D  | C 244 | 15.4 | 0.9 | 21 | 1 | AAV56709 | Sense primer Exon  |
| C 172 | 16.2 | 0.9 | 21 | 1 | AAI311083 | Bacterial 16S RNA   | C 245 | 15.4 | 0.9 | 21 | 1 | AAV56709 | Sense primer Exon  |
| C 173 | 16.2 | 0.9 | 21 | 1 | ABK99296  | Hepatitis C virus   | C 246 | 15.4 | 0.9 | 21 | 1 | AAV56709 | Sense primer Exon  |
| C 174 | 16.2 | 0.9 | 21 | 1 | ABK44421  | Human chromosome 1  | C 247 | 15.4 | 0.9 | 21 | 1 | AAV56709 | Sense primer Exon  |
| C 175 | 16.2 | 0.9 | 21 | 1 | ABK34114  | Human pigmentatio   | C 248 | 15.4 | 0.9 | 23 | 1 | AAH38761 | Escherichia coli p |
| C 176 | 16.2 | 0.9 | 21 | 1 | ADL14567  | Human SRC biomarka  | C 249 | 15.4 | 0.9 | 23 | 1 | AAH38761 | Escherichia coli p |
| C 177 | 16.2 | 0.9 | 22 | 1 | AAI66678  | Human CTEP DNA rel  | C 250 | 15.2 | 0.9 | 20 | 1 | AAH38761 | Escherichia coli p |
| C 178 | 16.2 | 0.9 | 22 | 1 | ABZ99041  | Human PDE4A-MTA ol  | C 251 | 15.2 | 0.9 | 20 | 1 | AAH38761 | Escherichia coli p |
| C 179 | 16.2 | 0.9 | 23 | 1 | AAA64536  | PCR primer G6 used  | C 252 | 15.2 | 0.9 | 20 | 1 | AAH38761 | Escherichia coli p |



|       |      |     |    |   |          |                          |       |      |     |    |   |          |                           |
|-------|------|-----|----|---|----------|--------------------------|-------|------|-----|----|---|----------|---------------------------|
| c 253 | 15.2 | 0.9 | 20 | 1 | AA117949 | Anti-CMV oligonucleotide | c 326 | 15.2 | 0.9 | 21 | 1 | AA248171 | CMV replication ch        |
| c 254 | 15.2 | 0.9 | 20 | 1 | AA117894 | Anti-CMV oligonucleotide | c 327 | 15.2 | 0.9 | 21 | 1 | AA14473  | Synthetic oligonucleotide |
| c 255 | 15.2 | 0.9 | 20 | 1 | AA118135 | STR 7 gene specific      | c 328 | 15.2 | 0.9 | 21 | 1 | AA257151 | Phosphorothioate 2        |
| c 256 | 15.2 | 0.9 | 20 | 1 | AA118149 | STR 14 gene specific     | c 329 | 15.2 | 0.9 | 21 | 1 | AA394541 | Example biological        |
| c 257 | 15.2 | 0.9 | 20 | 1 | AA118163 | STR 21 gene specific     | c 330 | 15.2 | 0.9 | 21 | 1 | AA394544 | Anti-CMV oligonucleotide  |
| c 258 | 15.2 | 0.9 | 20 | 1 | AA118355 | PCR primer used to       | c 331 | 15.2 | 0.9 | 21 | 1 | AA660903 | Human gene single         |
| c 259 | 15.2 | 0.9 | 20 | 1 | AA118661 | CDK4 specific anti       | c 332 | 15.2 | 0.9 | 21 | 1 | AA67221  | Human gene single         |
| c 260 | 15.2 | 0.9 | 20 | 1 | AA118716 | PCR primer hGH S2.       | c 333 | 15.2 | 0.9 | 21 | 1 | AA695371 | Oligonucleotide #3        |
| c 261 | 15.2 | 0.9 | 20 | 1 | AA118825 | Human FADD primer        | c 334 | 15.2 | 0.9 | 21 | 1 | AA695371 | Oligonucleotide #3        |
| c 262 | 15.2 | 0.9 | 20 | 1 | AA118825 | Gene typing PCR pr       | c 335 | 15.2 | 0.9 | 21 | 1 | AA695371 | Modified phosphorothioate |
| c 263 | 15.2 | 0.9 | 20 | 1 | AA118825 | Human p38beta anti       | c 336 | 15.2 | 0.9 | 21 | 1 | AA695371 | CMV targeted antis        |
| c 264 | 15.2 | 0.9 | 20 | 1 | AA118825 | Beagle dog ob gene       | c 337 | 15.2 | 0.9 | 21 | 1 | AA695371 | CMV targeted antis        |
| c 265 | 15.2 | 0.9 | 20 | 1 | AA118825 | Primer MUC5B rever       | c 338 | 15.2 | 0.9 | 21 | 1 | AA695371 | Hepatitis C virus         |
| c 266 | 15.2 | 0.9 | 20 | 1 | AA118825 | Human-specific glo       | c 339 | 15.2 | 0.9 | 21 | 1 | AA695371 | Hepatitis C virus         |
| c 267 | 15.2 | 0.9 | 20 | 1 | AA118825 | Human MEK1 phosph        | c 340 | 15.2 | 0.9 | 21 | 1 | AA695371 | Antisense oligonucleotide |
| c 268 | 15.2 | 0.9 | 20 | 1 | AA118825 | Human Her-1 anticse      | c 341 | 15.2 | 0.9 | 21 | 1 | AA695371 | Methylated antisense      |
| c 269 | 15.2 | 0.9 | 20 | 1 | AA118825 | Chimeric beta-gluc       | c 342 | 15.2 | 0.9 | 21 | 1 | AA695371 | Cytomegalovirus (C        |
| c 270 | 15.2 | 0.9 | 20 | 1 | AA118825 | Human calreticulin       | c 343 | 15.2 | 0.9 | 21 | 1 | AA695371 | Novel G protein-co        |
| c 271 | 15.2 | 0.9 | 20 | 1 | AA118825 | FAM modified probe       | c 344 | 15.2 | 0.9 | 21 | 1 | AA695371 | Novel G protein-co        |
| c 272 | 15.2 | 0.9 | 20 | 1 | AA118825 | Mouse genomic DNA        | c 345 | 15.2 | 0.9 | 21 | 1 | AA695371 | Oligomeric compound       |
| c 273 | 15.2 | 0.9 | 20 | 1 | AA118825 | Human RecQ protein       | c 346 | 15.2 | 0.9 | 21 | 1 | AA695371 | Oligomeric compound       |
| c 274 | 15.2 | 0.9 | 20 | 1 | AA118825 | Acyl CoA cholesterol     | c 347 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human Von Willebra        |
| c 275 | 15.2 | 0.9 | 20 | 1 | AA118825 | Human p38-beta MAP       | c 348 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human light chain         |
| c 276 | 15.2 | 0.9 | 20 | 1 | AA118825 | Mouse src-c chimera      | c 349 | 15.2 | 0.9 | 21 | 1 | AA695371 | Synthetic phosphor        |
| c 277 | 15.2 | 0.9 | 20 | 1 | AA118825 | Human TTH2 intron        | c 350 | 15.2 | 0.9 | 21 | 1 | AA695371 | HCNV RNA targetin         |
| c 278 | 15.2 | 0.9 | 20 | 1 | AA118825 | Real time PCR targ       | c 351 | 15.2 | 0.9 | 21 | 1 | AA695371 | HCNV inhibitory an        |
| c 279 | 15.2 | 0.9 | 20 | 1 | AA118825 | Matrix metalloprot       | c 352 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human TGR23-2 PCR         |
| c 280 | 15.2 | 0.9 | 20 | 1 | AA118825 | Leptin gene-specif       | c 353 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human TGR23-2 PCR         |
| c 281 | 15.2 | 0.9 | 20 | 1 | AA118825 | PCR primer #2 used       | c 354 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human GPCR TGR23-2        |
| c 282 | 15.2 | 0.9 | 21 | 1 | AA118825 | DNA for modulating       | c 355 | 15.2 | 0.9 | 21 | 1 | AA695371 | HCNV inhibitory an        |
| c 283 | 15.2 | 0.9 | 21 | 1 | AA118825 | DNA for modulating       | c 356 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human TGR23-2 liga        |
| c 284 | 15.2 | 0.9 | 21 | 1 | AA118825 | Antisense oligonuc       | c 357 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human TGR23-2 liga        |
| c 285 | 15.2 | 0.9 | 21 | 1 | AA118825 | CMV IE2 target gen       | c 358 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human TGR23-2 liga        |
| c 286 | 15.2 | 0.9 | 21 | 1 | AA118825 | Peptide nucleic ac       | c 359 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human GPCR TGR23-2        |
| c 287 | 15.2 | 0.9 | 21 | 1 | AA118825 | Antisense oligonuc       | c 360 | 15.2 | 0.9 | 21 | 1 | AA695371 | HCNV inhibitory an        |
| c 288 | 15.2 | 0.9 | 21 | 1 | AA118825 | Antisense oligonuc       | c 361 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human glycoprotein        |
| c 289 | 15.2 | 0.9 | 21 | 1 | AA118825 | Chimeric 2'-O-meth       | c 362 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human 18-2 antisense      |
| c 290 | 15.2 | 0.9 | 21 | 1 | AA118825 | Chimeric 2'-O-meth       | c 363 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human 18-2 antisense      |
| c 291 | 15.2 | 0.9 | 21 | 1 | AA118825 | Chimeric 2'-O-meth       | c 364 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human TGR23-2 liga        |
| c 292 | 15.2 | 0.9 | 21 | 1 | AA118825 | Phosphorothioate o       | c 365 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human TGR23-2 liga        |
| c 293 | 15.2 | 0.9 | 21 | 1 | AA118825 | Anti-cytomegalovir       | c 366 | 15.2 | 0.9 | 21 | 1 | AA695371 | Anti-CMV 2'-O-alky        |
| c 294 | 15.2 | 0.9 | 21 | 1 | AA118825 | ISIS-2922, cytoque       | c 367 | 15.2 | 0.9 | 21 | 1 | AA695371 | Anti-CMV 2'-O-alky        |
| c 295 | 15.2 | 0.9 | 21 | 1 | AA118825 | CMV gene oligonuc        | c 368 | 15.2 | 0.9 | 21 | 1 | AA695371 | Oligonucleotide fo        |
| c 296 | 15.2 | 0.9 | 21 | 1 | AA118825 | Human galactokinase      | c 369 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human NOV2 RTQ PCR        |
| c 297 | 15.2 | 0.9 | 21 | 1 | AA118825 | Antisense oligonuc       | c 370 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human G-protein co        |
| c 298 | 15.2 | 0.9 | 21 | 1 | AA118825 | Primer #2 for huma       | c 371 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human NOV31 revers        |
| c 299 | 15.2 | 0.9 | 21 | 1 | AA118825 | Human TSC gene exo       | c 372 | 15.2 | 0.9 | 21 | 1 | AA695371 | PCR primer contain        |
| c 300 | 15.2 | 0.9 | 21 | 1 | AA118825 | CMV target sequenc       | c 373 | 15.2 | 0.9 | 21 | 1 | AA695371 | Candida CDX1 gene         |
| c 301 | 15.2 | 0.9 | 21 | 1 | AA118825 | CMV antisense chim       | c 374 | 15.2 | 0.9 | 21 | 1 | AA695371 | Primer 9826 for ha        |
| c 302 | 15.2 | 0.9 | 21 | 1 | AA118825 | CMV antisense chim       | c 375 | 15.2 | 0.9 | 21 | 1 | AA695371 | Cloning vector mul        |
| c 303 | 15.2 | 0.9 | 21 | 1 | AA118825 | Fully modified pho       | c 376 | 15.2 | 0.9 | 21 | 1 | AA695371 | Degenerate PCR pri        |
| c 304 | 15.2 | 0.9 | 21 | 1 | AA118825 | Phosphorothioate 2       | c 377 | 15.2 | 0.9 | 21 | 1 | AA695371 | Chicory germacrone        |
| c 305 | 15.2 | 0.9 | 21 | 1 | AA118825 | Chimeric 2'-O-meth       | c 378 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human G-epsilonRI         |
| c 306 | 15.2 | 0.9 | 21 | 1 | AA118825 | Chimeric 2'-O-meth       | c 379 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human Fc-epsilonRI        |
| c 307 | 15.2 | 0.9 | 21 | 1 | AA118825 | Phosphorothioate o       | c 380 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human chromosome 1        |
| c 308 | 15.2 | 0.9 | 21 | 1 | AA118825 | Target cytomagalov       | c 381 | 15.2 | 0.9 | 21 | 1 | AA695371 | Toxicologically re        |
| c 309 | 15.2 | 0.9 | 21 | 1 | AA118825 | 2'-MOE gapped vers       | c 382 | 15.2 | 0.9 | 21 | 1 | AA695371 | Antisense PCR prim        |
| c 310 | 15.2 | 0.9 | 21 | 1 | AA118825 | Oligonucleotide us       | c 383 | 15.2 | 0.9 | 21 | 1 | AA695371 | IGF-I oligonucleot        |
| c 311 | 15.2 | 0.9 | 21 | 1 | AA118825 | Oligonucleotide us       | c 384 | 15.2 | 0.9 | 21 | 1 | AA695371 | IGF-I oligonucleot        |
| c 312 | 15.2 | 0.9 | 21 | 1 | AA118825 | Deletion sequence        | c 385 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human PTAIRE prot         |
| c 313 | 15.2 | 0.9 | 21 | 1 | AA118825 | Deletion sequence        | c 386 | 15.2 | 0.9 | 21 | 1 | AA695371 | Human G-alpha-12 a        |
| c 314 | 15.2 | 0.9 | 21 | 1 | AA118825 | HIV 5' UTR homolo        | c 387 | 15.2 | 0.9 | 21 | 1 | AA695371 | cdk2 ribozyme bind        |
| c 315 | 15.2 | 0.9 | 21 | 1 | AA118825 | Phosphorothioate o       | c 388 | 15.2 | 0.9 | 21 | 1 | AA695371 | Cell-cycle depende        |
| c 316 | 15.2 | 0.9 | 21 | 1 | AA118825 | Phosphorothioate o       | c 389 | 15.2 | 0.9 | 21 | 1 | AA695371 | Probe to mutant se        |
| c 317 | 15.2 | 0.9 | 21 | 1 | AA118825 | Mismatch reporter        | c 390 | 15.2 | 0.9 | 21 | 1 | AA695371 | Interleukin IL-8 h        |
| c 318 | 15.2 | 0.9 | 21 | 1 | AA118825 | HCNV antisense inh       | c 391 | 15.2 | 0.9 | 21 | 1 | AA695371 | Transforming growt        |
| c 319 | 15.2 | 0.9 | 21 | 1 | AA118825 | Mouse type II hair       | c 392 | 15.2 | 0.9 | 21 | 1 | AA695371 | ADA66485                  |
| c 320 | 15.2 | 0.9 | 21 | 1 | AA118825 | Antisense inhibito       | c 393 | 15.2 | 0.9 | 21 | 1 | AA695371 | ADA66486                  |
| c 321 | 15.2 | 0.9 | 21 | 1 | AA118825 | HCNV phosphorothio       | c 394 | 15.2 | 0.9 | 21 | 1 | AA695371 | ADA66486                  |
| c 322 | 15.2 | 0.9 | 21 | 1 | AA118825 | HCNV targeting ant       | c 395 | 15.2 | 0.9 | 21 | 1 | AA695371 | ADA66486                  |
| c 323 | 15.2 | 0.9 | 21 | 1 | AA118825 | HCNV targeted pho        | c 396 | 15.2 | 0.9 | 21 | 1 | AA695371 | ADA66486                  |
| c 324 | 15.2 | 0.9 | 21 | 1 | AA118825 | HCNV targeted pho        | c 397 | 15.2 | 0.9 | 21 | 1 | AA695371 | ADA66486                  |
| c 325 | 15.2 | 0.9 | 21 | 1 | AA118825 | CMV replication ch       | c 398 | 15.2 | 0.9 | 21 | 1 | AA695371 | ADA66486                  |

|       |      |     |    |   |           |                     |       |      |     |    |   |           |                     |
|-------|------|-----|----|---|-----------|---------------------|-------|------|-----|----|---|-----------|---------------------|
| C 399 | 15   | 0.9 | 23 | 1 | AAZ60724  | PCR primer used to  | C 472 | 14.6 | 0.8 | 21 | 1 | AAAC80113 | Reverse primer #25  |
| C 400 | 15   | 0.9 | 23 | 1 | AAZ29067  | Sense PCR primer f  | C 473 | 14.6 | 0.8 | 21 | 1 | AAC92275  | Mouse LKB1 PCR pri  |
| C 401 | 15   | 0.9 | 23 | 1 | AAAL13193 | PCR primer 944-966  | C 474 | 14.6 | 0.8 | 21 | 1 | AAAF95555 | Human gene single   |
| C 402 | 15   | 0.9 | 23 | 1 | AAAG4272  | Human TANGO 298 Ta  | C 475 | 14.6 | 0.8 | 21 | 1 | AAAF95059 | Human gene single   |
| C 403 | 15   | 0.9 | 23 | 1 | AAAG4272  | Human TANGO 298 Ta  | C 476 | 14.6 | 0.8 | 21 | 1 | AAAF95318 | Human gene single   |
| C 404 | 15   | 0.9 | 23 | 1 | AAAG4272  | Human TANGO 298 Ta  | C 477 | 14.6 | 0.8 | 21 | 1 | AAAF97060 | Human gene single   |
| C 405 | 15   | 0.9 | 23 | 1 | AAAG4272  | Human TANGO 298 Ta  | C 478 | 14.6 | 0.8 | 21 | 1 | AAAF28957 | Equine GW-CSF gene  |
| C 406 | 15   | 0.9 | 23 | 1 | AAAG4272  | Human TANGO 298 Ta  | C 479 | 14.6 | 0.8 | 21 | 1 | AAAF78643 | PCR primer for mec  |
| C 407 | 15   | 0.9 | 23 | 1 | AAAG4272  | Human TANGO 298 Ta  | C 480 | 14.6 | 0.8 | 21 | 1 | AAAF78640 | PCR primer for mec  |
| C 408 | 14.8 | 0.8 | 18 | 1 | AAAG6682  | Cdc 2 kinase hamme  | C 481 | 14.6 | 0.8 | 21 | 1 | AAAH0014  | SNP specific lower  |
| C 409 | 14.8 | 0.8 | 18 | 1 | AAAG6680  | Cdc 2 kinase hamme  | C 482 | 14.6 | 0.8 | 21 | 1 | AAAD08585 | Primer PHN3381, t   |
| C 410 | 14.8 | 0.8 | 18 | 1 | AAAG6681  | Cdc 2 kinase hamme  | C 483 | 14.6 | 0.8 | 21 | 1 | AAAD08585 | YMD oligonucleoti   |
| C 411 | 14.8 | 0.8 | 18 | 1 | AAZ77171  | Human biallelic ma  | C 484 | 14.6 | 0.8 | 21 | 1 | AAAO1358  | YMD oligonucleoti   |
| C 412 | 14.8 | 0.8 | 18 | 1 | AAH61848  | Cdc 2 kinase hamme  | C 485 | 14.6 | 0.8 | 21 | 1 | AAAO1359  | YMD oligonucleoti   |
| C 413 | 14.8 | 0.8 | 18 | 1 | AAH61847  | Cdc 2 kinase hamme  | C 486 | 14.6 | 0.8 | 21 | 1 | AAAO1355  | YMD oligonucleoti   |
| C 414 | 14.8 | 0.8 | 18 | 1 | AAH61846  | Cdc 2 kinase hamme  | C 487 | 14.6 | 0.8 | 21 | 1 | AAAO1365  | YMD oligonucleoti   |
| C 415 | 14.8 | 0.8 | 18 | 1 | ACA60596  | Antisense inhibiti  | C 488 | 14.6 | 0.8 | 21 | 1 | AAAD30438 | Human androgen rec  |
| C 416 | 14.8 | 0.8 | 18 | 1 | AD334621  | Human guanylate bi  | C 489 | 14.6 | 0.8 | 21 | 1 | ABK53794  | DMS-acceptor oxido  |
| C 417 | 14.8 | 0.8 | 18 | 1 | AAH82999  | cdk6 ribozyme bind  | C 490 | 14.6 | 0.8 | 21 | 1 | ABQ74754  | Human TNFR2 forwar  |
| C 418 | 14.8 | 0.8 | 19 | 1 | AAH82619  | cdk2 ribozyme bind  | C 491 | 14.6 | 0.8 | 21 | 1 | ABQ92791  | Human OGT1 consens  |
| C 419 | 14.8 | 0.8 | 19 | 1 | AAH84266  | Cyclin D1 ribozyme  | C 492 | 14.6 | 0.8 | 21 | 1 | ABD79190  | Nucleic acid encod  |
| C 420 | 14.8 | 0.8 | 19 | 1 | AAH58161  | Cell-cycle depende  | C 493 | 14.6 | 0.8 | 21 | 1 | ADC64462  | Rat ERK-3 Designed  |
| C 421 | 14.8 | 0.8 | 19 | 1 | AAH59428  | Cyclin D1 ribozyme  | C 494 | 14.6 | 0.8 | 21 | 1 | ADD35311  | Human KIAA0172 ass  |
| C 422 | 14.8 | 0.8 | 19 | 1 | AAH57781  | Cell-cycle depende  | C 495 | 14.6 | 0.8 | 22 | 1 | AAQ41809  | Baculovirus C2 com  |
| C 423 | 14.8 | 0.8 | 20 | 1 | AAV12449  | Growth hormone rec  | C 496 | 14.6 | 0.8 | 22 | 1 | AAZ44872  | Human apolipoprote  |
| C 424 | 14.8 | 0.8 | 20 | 1 | AAV52681  | Hepatocyte nuclear  | C 497 | 14.6 | 0.8 | 22 | 1 | AAQ72227  | Single nucleotide   |
| C 425 | 14.8 | 0.8 | 20 | 1 | AAZ01841  | PCR primer used to  | C 498 | 14.6 | 0.8 | 22 | 1 | AAAC80114 | Reverse primer #26  |
| C 426 | 14.8 | 0.8 | 20 | 1 | AAZ79768  | PCR primer H11791   | C 499 | 14.6 | 0.8 | 22 | 1 | AAAC23687 | Primer A #1 used a  |
| C 427 | 14.8 | 0.8 | 20 | 1 | AAZ23550  | Deletion sequence   | C 500 | 14.6 | 0.8 | 22 | 1 | ABE61060  | Human automated ge  |
| C 428 | 14.8 | 0.8 | 20 | 1 | AAZ36936  | PCR primer used to  | C 501 | 14.6 | 0.8 | 22 | 1 | ABZ29860  | Candida albicans G  |
| C 429 | 14.8 | 0.8 | 20 | 1 | AAZ33176  | Human STAT3 phosph  | C 502 | 14.6 | 0.8 | 22 | 1 | ABN89666  | Human NOV1 forward  |
| C 430 | 14.8 | 0.8 | 20 | 1 | AAZ32480  | Human NADH ubiquin  | C 503 | 14.6 | 0.8 | 22 | 1 | ABQ81301  | Cytochrome P450 CY  |
| C 431 | 14.8 | 0.8 | 20 | 1 | AAZ66452  | Human STAT3 antise  | C 504 | 14.6 | 0.8 | 22 | 1 | AAAL43364 | Bacillus sp novel   |
| C 432 | 14.8 | 0.8 | 20 | 1 | AAZ66452  | Human STAT3 antise  | C 505 | 14.6 | 0.8 | 22 | 1 | AAAL43365 | Bacillus sp novel   |
| C 433 | 14.8 | 0.8 | 20 | 1 | AAZ66452  | Human STAT3 antise  | C 506 | 14.6 | 0.8 | 22 | 1 | AAAL43365 | Bacillus sp novel   |
| C 434 | 14.8 | 0.8 | 20 | 1 | AAZ35074  | Human Stat3 antise  | C 507 | 14.6 | 0.8 | 22 | 1 | AAAL43762 | Human NOV1 gene PC  |
| C 435 | 14.8 | 0.8 | 20 | 1 | AAZ933374 | Human Stat3 antise  | C 508 | 14.6 | 0.8 | 22 | 1 | AAAL43777 | Human NOV2 gene PC  |
| C 436 | 14.8 | 0.8 | 20 | 1 | ABX09073  | Human dual specific | C 509 | 14.6 | 0.8 | 22 | 1 | ACD13238  | Novel human protei  |
| C 437 | 14.8 | 0.8 | 20 | 1 | ABX69706  | Mouse CLASP-5 PCR   | C 510 | 14.6 | 0.8 | 22 | 1 | ABX72300  | Human NOVX DNA PCR  |
| C 438 | 14.8 | 0.8 | 20 | 1 | ABZ70994  | Human HKRI phospho  | C 511 | 14.6 | 0.8 | 22 | 1 | ACC80005  | Human HDAC9 exon 4  |
| C 439 | 14.8 | 0.8 | 20 | 1 | ACF39677  | MHC class II trans  | C 512 | 14.6 | 0.8 | 22 | 1 | ADA00216  | Mouse and human mi  |
| C 440 | 14.8 | 0.8 | 20 | 1 | ADC98368  | IGF503 polymorphis  | C 513 | 14.6 | 0.8 | 22 | 1 | ADA00216  | PCR primer PI used  |
| C 441 | 14.8 | 0.8 | 20 | 1 | ADE28924  | Forward AG5335 RT-  | C 514 | 14.6 | 0.8 | 22 | 1 | ADL7615   | RTQ-PCR primer #1   |
| C 442 | 14.8 | 0.8 | 21 | 1 | AAZ09234  | Human biallelic po  | C 515 | 14.6 | 0.8 | 22 | 1 | ADC26573  | Human NOV1 RTQ PCR  |
| C 443 | 14.8 | 0.8 | 21 | 1 | AAV433747 | Cancer associated   | C 516 | 14.6 | 0.8 | 22 | 1 | ADD72131  | Human NOV1 RTQ PCR  |
| C 444 | 14.8 | 0.8 | 21 | 1 | AAZ26230  | Human polymorphic   | C 517 | 14.6 | 0.8 | 22 | 1 | ADD72131  | Human NOV2 RTQ PCR  |
| C 445 | 14.8 | 0.8 | 21 | 1 | AAZ26230  | Human polymorphic   | C 518 | 14.6 | 0.8 | 22 | 1 | ADD72131  | Human NOV1 RTQ PCR  |
| C 446 | 14.8 | 0.8 | 21 | 1 | ABZ76238  | Bacterial cytochro  | C 519 | 14.6 | 0.8 | 22 | 1 | ADD72131  | Stage 2 MSP primer  |
| C 447 | 14.8 | 0.8 | 21 | 1 | ADD15228  | Primer for domain   | C 520 | 14.4 | 0.8 | 16 | 1 | ADD72131  | DNA primer for hum  |
| C 448 | 14.8 | 0.8 | 22 | 1 | AAZ02483  | Primer #2 for immu  | C 521 | 14.4 | 0.8 | 17 | 1 | AAQ78692  | Human IGA membrane  |
| C 449 | 14.8 | 0.8 | 22 | 1 | AAZ02483  | Primer #2 for immu  | C 522 | 14.4 | 0.8 | 17 | 1 | AAQ78692  | Human IL-2 recepto  |
| C 450 | 14.8 | 0.8 | 22 | 1 | AAV52760  | Immunoglobulin kap  | C 523 | 14.4 | 0.8 | 17 | 1 | AAV94784  | Membrane extracell  |
| C 451 | 14.8 | 0.8 | 22 | 1 | AAZ10007  | Primer Vks-R for h  | C 524 | 14.4 | 0.8 | 17 | 1 | ABX03441  | Human CD20 G-cleav  |
| C 452 | 14.8 | 0.8 | 22 | 1 | AAZ09923  | Primer 2 for human  | C 525 | 14.4 | 0.8 | 17 | 1 | ABX03441  | HBa2 mutation corr  |
| C 453 | 14.8 | 0.8 | 22 | 1 | AAH39266  | SNP specific lower  | C 526 | 14.4 | 0.8 | 17 | 1 | ABX03441  | HBa2 mutation corr  |
| C 454 | 14.8 | 0.8 | 22 | 1 | AAH39266  | SNP specific lower  | C 527 | 14.4 | 0.8 | 17 | 1 | ABX03441  | HBa2 mutation corr  |
| C 455 | 14.8 | 0.8 | 22 | 1 | AAZ05572  | NOVX reverse PCR p  | C 528 | 14.4 | 0.8 | 17 | 1 | ABX03441  | HBa2 mutation corr  |
| C 456 | 14.8 | 0.8 | 22 | 1 | ACD19499  | Novel human protei  | C 529 | 14.4 | 0.8 | 17 | 1 | AAZ05572  | Primer #3 used to   |
| C 457 | 14.8 | 0.8 | 22 | 1 | AAZ72335  | Human NOVX DNA PCR  | C 530 | 14.4 | 0.8 | 17 | 1 | AAZ05572  | Human multi drug r  |
| C 458 | 14.8 | 0.8 | 20 | 1 | AAZ01112  | Reverse primer #24  | C 531 | 14.4 | 0.8 | 17 | 1 | ABV78818  | Human HTPL scannin  |
| C 459 | 14.6 | 0.8 | 21 | 1 | AAZ04445  | Human CTR gene up   | C 532 | 14.4 | 0.8 | 17 | 1 | ABV78818  | Human HTPL scannin  |
| C 460 | 14.6 | 0.8 | 21 | 1 | AAZ04445  | Potato PPO primer   | C 533 | 14.4 | 0.8 | 17 | 1 | ABV78818  | Human ERG DNazyme   |
| C 461 | 14.6 | 0.8 | 21 | 1 | AAQ66678  | HEV strain BUR-121  | C 534 | 14.4 | 0.8 | 17 | 1 | ABV78818  | Human ERG DNazyme   |
| C 462 | 14.6 | 0.8 | 21 | 1 | AAQ66678  | HEV strain BUR-121  | C 535 | 14.4 | 0.8 | 17 | 1 | ABV78818  | Human ERG DNazyme   |
| C 463 | 14.6 | 0.8 | 21 | 1 | AAQ95568  | Primer B2 (Group 4  | C 536 | 14.4 | 0.8 | 17 | 1 | ABV78818  | Human ERG DNazyme   |
| C 464 | 14.6 | 0.8 | 21 | 1 | AAZ7419   | HEV strain Burma-1  | C 537 | 14.4 | 0.8 | 17 | 1 | ABV78818  | Human ERG DNazyme   |
| C 465 | 14.6 | 0.8 | 21 | 1 | AAV71629  | HEV ORF proteins e  | C 538 | 14.4 | 0.8 | 17 | 1 | ABV78818  | Human ERG DNazyme   |
| C 466 | 14.6 | 0.8 | 21 | 1 | AAV38621  | Human ICAM-1, E-se  | C 539 | 14.4 | 0.8 | 17 | 1 | ABV78818  | Human ERG DNazyme   |
| C 467 | 14.6 | 0.8 | 21 | 1 | AAZ66779  | Human polymorphic   | C 540 | 14.4 | 0.8 | 17 | 1 | ABV78818  | Human ERG DNazyme   |
| C 468 | 14.6 | 0.8 | 21 | 1 | AAZ95667  | Human LKB1 gene pr  | C 541 | 14.4 | 0.8 | 17 | 1 | ABV78818  | Human ERG DNazyme   |
| C 469 | 14.6 | 0.8 | 21 | 1 | AAZ57835  | Tumour necrosis fa  | C 542 | 14.4 | 0.8 | 17 | 1 | ABV78818  | Human ERG DNazyme   |
| C 470 | 14.6 | 0.8 | 21 | 1 | AAZ57835  | HSV-2 ICP6 gene pr  | C 543 | 14.4 | 0.8 | 17 | 1 | ABV78818  | Tumour suppressio   |
| C 471 | 14.6 | 0.8 | 21 | 1 | AAZ75780  | Human biallelic ma  | C 544 | 14.4 | 0.8 | 17 | 1 | ABV78818  | Human HER2 DNazyme  |
| C 471 | 14.6 | 0.8 | 21 | 1 | AAZ73450  | Human biallelic ma  | C 544 | 14.4 | 0.8 | 17 | 1 | ABV78818  | Human K-Ras DNazyme |



|       |      |     |    |   |          |                     |       |      |     |    |   |          |                     |
|-------|------|-----|----|---|----------|---------------------|-------|------|-----|----|---|----------|---------------------|
| C 691 | 14.2 | 0.8 | 20 | 1 | AAT66009 | Primer #2 to ampli  | 764   | 14.2 | 0.8 | 20 | 1 | ABQ75387 | Human RNase H1I an  |
| C 692 | 14.2 | 0.8 | 20 | 1 | AAT84760 | Primer ITS2 for Ca  | C 765 | 14.2 | 0.8 | 20 | 1 | ABQ75387 | Human RNase H1I an  |
| C 693 | 14.2 | 0.8 | 20 | 1 | AAT84762 | Primer ITS4 for Ca  | C 766 | 14.2 | 0.8 | 20 | 1 | ABL59026 | Nucleotide sequenc  |
| C 694 | 14.2 | 0.8 | 20 | 1 | AAT75521 | Candida universal   | 767   | 14.2 | 0.8 | 20 | 1 | ABQ93219 | T. tauschii/wheat   |
| C 695 | 14.2 | 0.8 | 20 | 1 | AAT75523 | Candida universal   | 768   | 14.2 | 0.8 | 20 | 1 | ABQ93219 | Oestrogen receptor  |
| C 696 | 14.2 | 0.8 | 20 | 1 | AAT68379 | Loc1-specific prim  | 769   | 14.2 | 0.8 | 20 | 1 | AAD39532 | Human calreticulin  |
| C 697 | 14.2 | 0.8 | 20 | 1 | AAV62540 | Ribosomal Gene 5.8  | 770   | 14.2 | 0.8 | 20 | 1 | ABL44407 | Human chromosome 1  |
| C 698 | 14.2 | 0.8 | 20 | 1 | AAV62539 | Ribosomal Gene 5.8  | 771   | 14.2 | 0.8 | 20 | 1 | ABT05202 | TNFR1 expression m  |
| C 699 | 14.2 | 0.8 | 20 | 1 | AAV59027 | Internal transcrib  | C 772 | 14.2 | 0.8 | 20 | 1 | ABK27372 | Mutant gamma-amino  |
| C 700 | 14.2 | 0.8 | 20 | 1 | AAV59024 | Internal transcrib  | C 773 | 14.2 | 0.8 | 20 | 1 | ABK27372 | Mycosphaerella spe  |
| C 701 | 14.2 | 0.8 | 20 | 1 | AAV43273 | PCR primer ITS3 us  | C 774 | 14.2 | 0.8 | 20 | 1 | ABA94548 | Mycosphaerella spe  |
| C 702 | 14.2 | 0.8 | 20 | 1 | AAV43272 | PCR primer ITS2 us  | C 775 | 14.2 | 0.8 | 20 | 1 | ABV78756 | Cordyceps PCR prim  |
| C 703 | 14.2 | 0.8 | 20 | 1 | AAV11551 | Human lipid metabo  | 776   | 14.2 | 0.8 | 20 | 1 | ABV78756 | Cordyceps PCR prim  |
| C 704 | 14.2 | 0.8 | 20 | 1 | AAV42503 | PCR primer 2 used   | 777   | 14.2 | 0.8 | 20 | 1 | ABD34903 | Human E2F transcri  |
| C 705 | 14.2 | 0.8 | 20 | 1 | AAV22643 | PCR primer specific | 778   | 14.2 | 0.8 | 20 | 1 | ABD34903 | Human E2F transcri  |
| C 706 | 14.2 | 0.8 | 20 | 1 | AAV18199 | Primer for Ranconi  | C 779 | 14.2 | 0.8 | 20 | 1 | ABD38471 | Bovine MHC class I  |
| C 707 | 14.2 | 0.8 | 20 | 1 | AAV70045 | Rat C-Fos protein   | C 780 | 14.2 | 0.8 | 20 | 1 | AAV70045 | Telomerase reverse  |
| C 708 | 14.2 | 0.8 | 20 | 1 | AAV24006 | Primer ITS3 for Ca  | C 781 | 14.2 | 0.8 | 20 | 1 | AB195967 | Capture oligonucle  |
| C 709 | 14.2 | 0.8 | 20 | 1 | AAV24009 | Primer ITS2 for Ca  | C 782 | 14.2 | 0.8 | 20 | 1 | AB193287 | Capture oligonucle  |
| C 710 | 14.2 | 0.8 | 20 | 1 | AAT89974 | Candida albicans I  | 783   | 14.2 | 0.8 | 20 | 1 | ABQ87695 | Human ESR1 exon 1G  |
| C 711 | 14.2 | 0.8 | 20 | 1 | AAT89976 | Candida albicans I  | 784   | 14.2 | 0.8 | 20 | 1 | ABQ87695 | Human oligonucleot  |
| C 712 | 14.2 | 0.8 | 20 | 1 | AAV17950 | Anti-CMV oligonuc   | C 785 | 14.2 | 0.8 | 20 | 1 | AB285058 | Human oligonucleot  |
| C 713 | 14.2 | 0.8 | 20 | 1 | AAV17890 | Anti-CMV oligonuc   | C 786 | 14.2 | 0.8 | 20 | 1 | AB285420 | Human oligonucleot  |
| C 714 | 14.2 | 0.8 | 20 | 1 | AAZ18075 | MAP 5 gene specifi  | C 787 | 14.2 | 0.8 | 20 | 1 | AB285420 | Human oligonucleot  |
| C 715 | 14.2 | 0.8 | 20 | 1 | AAZ18074 | MAP 4 gene specifi  | C 788 | 14.2 | 0.8 | 20 | 1 | AB284777 | Human oligonucleot  |
| C 716 | 14.2 | 0.8 | 20 | 1 | AAZ18077 | MAP 6 gene specifi  | 789   | 14.2 | 0.8 | 20 | 1 | AB287947 | Human oligonucleot  |
| C 717 | 14.2 | 0.8 | 20 | 1 | AAZ18193 | Serine threonine k  | C 790 | 14.2 | 0.8 | 20 | 1 | AB287022 | Human oligonucleot  |
| C 718 | 14.2 | 0.8 | 20 | 1 | AAZ18198 | Serine threonine k  | C 791 | 14.2 | 0.8 | 20 | 1 | AB288149 | Human oligonucleot  |
| C 719 | 14.2 | 0.8 | 20 | 1 | AAV70875 | PCR primer ITS3 fo  | C 792 | 14.2 | 0.8 | 20 | 1 | AB287509 | Human oligonucleot  |
| C 720 | 14.2 | 0.8 | 20 | 1 | AAV26351 | PCR primer 2S used  | C 793 | 14.2 | 0.8 | 20 | 1 | ABV77015 | Primer ITS3 used t  |
| C 721 | 14.2 | 0.8 | 20 | 1 | AAZ03102 | PCR primer used to  | C 794 | 14.2 | 0.8 | 20 | 1 | ABV77014 | Primer ITS2 used t  |
| C 722 | 14.2 | 0.8 | 20 | 1 | AAZ05087 | PCR primer used to  | 795   | 14.2 | 0.8 | 20 | 1 | ACA61050 | Guignardia interna  |
| C 723 | 14.2 | 0.8 | 20 | 1 | AAZ03873 | PCR primer used to  | C 796 | 14.2 | 0.8 | 20 | 1 | ACA61051 | Guignardia interna  |
| C 724 | 14.2 | 0.8 | 20 | 1 | AAZ04109 | PCR primer used to  | C 797 | 14.2 | 0.8 | 20 | 1 | AD21316  | PCR primer for the  |
| C 725 | 14.2 | 0.8 | 20 | 1 | AAZ06548 | Oligonucleotide pr  | 798   | 14.2 | 0.8 | 20 | 1 | ADA44788 | Antisense oligonuc  |
| C 726 | 14.2 | 0.8 | 20 | 1 | AAZ06549 | Oligonucleotide pr  | C 799 | 14.2 | 0.8 | 20 | 1 | ABT34198 | Mouse short hetero  |
| C 727 | 14.2 | 0.8 | 20 | 1 | AAZ89549 | PCR primer trpb fo  | C 800 | 14.2 | 0.8 | 20 | 1 | ACC49703 | Human KSR chimeric  |
| C 728 | 14.2 | 0.8 | 20 | 1 | AAZ23552 | Deletion sequence   | C 801 | 14.2 | 0.8 | 20 | 1 | ACC50005 | Oligonucleotide pr  |
| C 729 | 14.2 | 0.8 | 20 | 1 | AAZ36433 | PCR primer used to  | 802   | 14.2 | 0.8 | 20 | 1 | ACC50004 | Oligonucleotide pr  |
| C 730 | 14.2 | 0.8 | 20 | 1 | AAZ27102 | Primer for Candida  | 803   | 14.2 | 0.8 | 20 | 1 | ABV99905 | Streptococcus ther  |
| C 731 | 14.2 | 0.8 | 20 | 1 | AAZ22586 | PCR primer #2 for   | C 804 | 14.2 | 0.8 | 20 | 1 | ABV99905 | Mouse src-c chimere |
| C 732 | 14.2 | 0.8 | 20 | 1 | AAZ29421 | Rat JNK1-specific   | C 805 | 14.2 | 0.8 | 20 | 1 | ADA26668 | Rat Jun N-terminal  |
| C 733 | 14.2 | 0.8 | 20 | 1 | AAZ13128 | P13K antisense inh  | 806   | 14.2 | 0.8 | 20 | 1 | AD52299  | Human IFNGR2 antis  |
| C 734 | 14.2 | 0.8 | 20 | 1 | AAZ07709 | Human collectin se  | C 807 | 14.2 | 0.8 | 20 | 1 | AD52299  | Human IFNGR2 antis  |
| C 735 | 14.2 | 0.8 | 20 | 1 | AAZ95024 | Prostate cancer di  | C 808 | 14.2 | 0.8 | 20 | 1 | AAV55498 | Human FGFR-3 antis  |
| C 736 | 14.2 | 0.8 | 20 | 1 | AAZ40718 | Primer for sequenc  | C 809 | 14.2 | 0.8 | 20 | 1 | AAV55498 | Fungal universal I  |
| C 737 | 14.2 | 0.8 | 20 | 1 | AAZ72227 | Human biallelic ma  | C 810 | 14.2 | 0.8 | 20 | 1 | ACC43371 | PCR primer #14 for  |
| C 738 | 14.2 | 0.8 | 20 | 1 | AAZ99697 | CC92 heavy chain o  | C 811 | 14.2 | 0.8 | 20 | 1 | ACC47147 | Nucleotide sequenc  |
| C 739 | 14.2 | 0.8 | 20 | 1 | AAZ99714 | Vha1phatAG oligonu  | C 812 | 14.2 | 0.8 | 20 | 1 | AAV62456 | Human ABC transpor  |
| C 740 | 14.2 | 0.8 | 20 | 1 | AAZ72056 | Japanese citrus vi  | 813   | 14.2 | 0.8 | 20 | 1 | AAV60972 | Human MyD88 antis   |
| C 741 | 14.2 | 0.8 | 20 | 1 | AAZ62964 | JNK antisense olig  | C 814 | 14.2 | 0.8 | 20 | 1 | ADC36216 | Weed controller me  |
| C 742 | 14.2 | 0.8 | 20 | 1 | AAZ94772 | PCR primer ITS2 us  | C 815 | 14.2 | 0.8 | 20 | 1 | ADC35560 | Human CD81/TAPA-1   |
| C 743 | 14.2 | 0.8 | 20 | 1 | AAZ94773 | PCR primer ITS3 us  | 816   | 14.2 | 0.8 | 20 | 1 | AAQ51806 | Encodes ballast co  |
| C 744 | 14.2 | 0.8 | 20 | 1 | AAZ72311 | Single nucleotide   | C 817 | 14.2 | 0.8 | 20 | 1 | AAQ51806 | Enzymatic RNA mole  |
| C 745 | 14.2 | 0.8 | 20 | 1 | AAZ72320 | Single nucleotide   | 818   | 14.2 | 0.8 | 20 | 1 | AAV42247 | Primer derived fro  |
| C 746 | 14.2 | 0.8 | 20 | 1 | AAZ72296 | 3' primer used to   | 819   | 14.2 | 0.8 | 20 | 1 | AAV51809 | Zea mays genome re  |
| C 747 | 14.2 | 0.8 | 20 | 1 | AAZ90638 | Mouse immunoglobul  | C 820 | 14.2 | 0.8 | 20 | 1 | AAV51812 | Zea mays genome re  |
| C 748 | 14.2 | 0.8 | 20 | 1 | AAH46457 | Oligonucleotide #6  | 821   | 14.2 | 0.8 | 20 | 1 | AAV09125 | Human biallelic po  |
| C 749 | 14.2 | 0.8 | 20 | 1 | AAH44591 | Guar and locust be  | C 822 | 14.2 | 0.8 | 20 | 1 | AAV08249 | PCR primer ABCR-EX  |
| C 750 | 14.2 | 0.8 | 20 | 1 | AAH44593 | Internal transcrib  | C 823 | 14.2 | 0.8 | 20 | 1 | AAV62007 | L monocytogenes hl  |
| C 751 | 14.2 | 0.8 | 20 | 1 | AAH44593 | Internal transcrib  | C 824 | 14.2 | 0.8 | 20 | 1 | AAV62007 | Human polymorphic   |
| C 752 | 14.2 | 0.8 | 20 | 1 | AAH08396 | Internal transcrib  | C 825 | 14.2 | 0.8 | 20 | 1 | AAV62007 | Human polymorphic   |
| C 753 | 14.2 | 0.8 | 20 | 1 | AAH08397 | Universal fungal i  | C 826 | 14.2 | 0.8 | 20 | 1 | AAV17882 | Anti-CMV oligonuc   |
| C 754 | 14.2 | 0.8 | 20 | 1 | AAH08397 | Universal fungal i  | 827   | 14.2 | 0.8 | 20 | 1 | AAA07030 | Human integrin bet  |
| C 755 | 14.2 | 0.8 | 20 | 1 | AAH08397 | Universal fungal i  | C 828 | 14.2 | 0.8 | 20 | 1 | AAV59350 | Human STP2 gene pr  |
| C 756 | 14.2 | 0.8 | 20 | 1 | AAH46289 | Human interferon r  | C 829 | 14.2 | 0.8 | 20 | 1 | AAV59350 | Human biallelic ma  |
| C 757 | 14.2 | 0.8 | 20 | 1 | AAH96755 | Human cytohesin-2   | 830   | 14.2 | 0.8 | 20 | 1 | AAV27374 | Mutated Influenza   |
| C 758 | 14.2 | 0.8 | 20 | 1 | AAH97777 | 16S/23S rRNA spacer | C 831 | 14.2 | 0.8 | 20 | 1 | AAV27374 | Human gene single   |
| C 759 | 14.2 | 0.8 | 20 | 1 | AAH73769 | Guignardia citrica  | 832   | 14.2 | 0.8 | 20 | 1 | AAE97537 | Human gene single   |
| C 760 | 14.2 | 0.8 | 20 | 1 | AAH73770 | Guignardia citrica  | 833   | 14.2 | 0.8 | 20 | 1 | AAE95312 | Human gene single   |
| C 761 | 14.2 | 0.8 | 20 | 1 | ABN95668 | Phytophthora infes  | 834   | 14.2 | 0.8 | 20 | 1 | AAH62348 | ATP3 polymorphism   |
| C 762 | 14.2 | 0.8 | 20 | 1 | ABN74847 | Human caspase 2 an  | 835   | 14.2 | 0.8 | 20 | 1 | AAH62348 | Opiate receptor li  |
| C 763 | 14.2 | 0.8 | 20 | 1 | ABK95760 | Mouse RAIDD antis   | 836   | 14.2 | 0.8 | 20 | 1 | AAH62637 | Murine ztrypl codi  |

|       |      |     |    |   |           |                     |       |      |     |    |   |           |                     |
|-------|------|-----|----|---|-----------|---------------------|-------|------|-----|----|---|-----------|---------------------|
| C 837 | 14.2 | 0.8 | 21 | 1 | AAF90246  | PCR primer for UDP  | 910   | 14   | 0.8 | 20 | 1 | AAAD12619 | Human ANC_2H01 cDN  |
| C 838 | 14.2 | 0.8 | 21 | 1 | AAF87687  | Human RecQ5 type D  | C 911 | 14   | 0.8 | 20 | 1 | ABZ93277  | Human oligonucleot  |
| C 839 | 14.2 | 0.8 | 21 | 1 | AAAC86918 | Critical sequence   | C 912 | 14   | 0.8 | 20 | 1 | ABZ22802  | Human heparanase p  |
| C 840 | 14.2 | 0.8 | 21 | 1 | AAAD09996 | Mus musculus goose  | C 913 | 14   | 0.8 | 20 | 1 | ACC86848  | Mouse VSGFR-1 chim  |
| C 841 | 14.2 | 0.8 | 21 | 1 | ABK65778  | Human single nucle  | 914   | 14   | 0.8 | 21 | 1 | AAAX09162 | Human biallelic po  |
| C 842 | 14.2 | 0.8 | 21 | 1 | ABK65823  | Human single nucle  | 915   | 14   | 0.8 | 21 | 1 | AAV08201  | PCR primer used to  |
| C 843 | 14.2 | 0.8 | 21 | 1 | ABK65823  | Forward PCR primer  | C 916 | 14   | 0.8 | 21 | 1 | AAAX35653 | PCR primer hpl-629  |
| C 844 | 14.2 | 0.8 | 21 | 1 | ABK40345  | Human polymorphism  | C 917 | 14   | 0.8 | 21 | 1 | AAAX75055 | Human interleukin-  |
| C 845 | 14.2 | 0.8 | 21 | 1 | ABK60153  | Human polymorphism  | 918   | 14   | 0.8 | 21 | 1 | AAH28645  | PGK1 PCR primer ov  |
| C 846 | 14.2 | 0.8 | 21 | 1 | ABK60250  | Human polymorphism  | 919   | 14   | 0.8 | 21 | 1 | ABL53717  | S. cerevisiae Pk1   |
| C 847 | 14.2 | 0.8 | 21 | 1 | ABK60249  | Human polymorphism  | 920   | 14   | 0.8 | 21 | 1 | ABZ57693  | Human src biomarke  |
| C 848 | 14.2 | 0.8 | 21 | 1 | ABK60767  | Human aquaporin 5   | 921   | 14   | 0.8 | 21 | 1 | ADD14266  | Rat ICAM hammerhea  |
| C 849 | 14.2 | 0.8 | 21 | 1 | ABK61245  | Human aquaporin 5   | 922   | 13.8 | 0.8 | 17 | 1 | AAAT53444 | Human c-myb hamme   |
| C 850 | 14.2 | 0.8 | 21 | 1 | ABK61241  | Human aquaporin 5   | C 923 | 13.8 | 0.8 | 17 | 1 | AAAT81489 | Human c-myb hamme   |
| C 851 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Rat metallothionei  | C 924 | 13.8 | 0.8 | 17 | 1 | AAAT81488 | Human c-myb hamme   |
| C 852 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human epoxide hydr  | 925   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Probe #9 for inter  |
| C 853 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human epoxide hydr  | 926   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human KDR VEGF rec  |
| C 854 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human adipose prot  | C 927 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Integrin subunit b  |
| C 855 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human adipose prot  | 928   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human A-Raf substr  |
| C 856 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human UGRI1A7 codon | 929   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human genomic SNP   |
| C 857 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human AAG SNP ana   | C 930 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Mutant capture oli  |
| C 858 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Mouse zsig37 ortho  | 931   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human GMPLP-1 17-m  |
| C 859 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Mouse adipose comp  | 932   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human GMPLP-1 17-m  |
| C 860 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human Folate recep  | 933   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human GMPLP-1 17-m  |
| C 861 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Mouse tryptase-lik  | C 934 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human GMPLP-1 17-m  |
| C 862 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human zsig37 cDNA   | C 935 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human GMPLP-1 17-m  |
| C 863 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Mouse serine prote  | C 936 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human KTMW1a porti  |
| C 864 | 14.2 | 0.8 | 21 | 1 | ABK61247  | ZC18697 oligo used  | C 937 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human ERG G-leave   |
| C 865 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human src biomarke  | C 938 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human ERG DNzyme    |
| C 866 | 14.2 | 0.8 | 21 | 1 | ABK61247  | HPV detection meth  | 939   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human PAP-Ea asso   |
| C 867 | 14.2 | 0.8 | 21 | 1 | ABK61247  | IGF-I oligonucleot  | 940   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human FOSHL1 scann  |
| C 868 | 14.2 | 0.8 | 21 | 1 | ABK61247  | IGF-I oligonucleot  | 941   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human POSHL1 scann  |
| C 869 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Resistance genes m  | C 942 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human POSHL1 scann  |
| C 870 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Mouse flt-1 VEGF r  | C 943 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human CLCA1 gene e  |
| C 871 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human KDR VEGF rec  | C 944 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human CLCA1 gene e  |
| C 872 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Mouse flt-1 VEGF r  | 945   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human CLCA1 gene e  |
| C 873 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 946   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human MDZ7 scannin  |
| C 874 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 947   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human K-Ras DNzyme  |
| C 875 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 948   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human HER2 DNzyme   |
| C 876 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 949   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human H-Ras DNzyme  |
| C 877 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 950   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human H-Ras DNzyme  |
| C 878 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 951   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human H-Ras DNzyme  |
| C 879 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | C 952 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | HCV DNzyme substr   |
| C 880 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 953   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | HCV DNzyme substr   |
| C 881 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | C 954 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Murine oligonucleo  |
| C 882 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | C 955 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Murine oligonucleo  |
| C 883 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 956   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Murine oligonucleo  |
| C 884 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 957   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Tumour suppression  |
| C 885 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 958   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human Na/H exchang  |
| C 886 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | C 959 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human G-alpha-12 a  |
| C 887 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 960   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Herpes simplex vir  |
| C 888 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | C 961 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | CMV antisense olig  |
| C 889 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | C 962 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Peptide nucleic ac  |
| C 890 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 963   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Mouse flk-1 VEGF r  |
| C 891 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 964   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Primer 1, located   |
| C 892 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 965   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | MHC class II Ea pr  |
| C 893 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | C 966 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Anti-CMV oligonucle |
| C 894 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | C 967 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human G-alpha-11 p  |
| C 895 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | C 968 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human IKK-Beta ant  |
| C 896 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 969   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human Herp-3 PCR p  |
| C 897 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | C 970 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human G-alpha-11 p  |
| C 898 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 971   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | PCR primer used to  |
| C 899 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | C 972 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | G-alpha-12 antisen  |
| C 900 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | C 973 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Cdc 2 kinase hamme  |
| C 901 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | C 974 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human G-alpha-12 a  |
| C 902 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 975   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Escherichia coli H  |
| C 903 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | C 976 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human PDK-1 antise  |
| C 904 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | C 977 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Primer #4. Synthe   |
| C 905 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | C 978 | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Oat Beta-amyrin ex  |
| C 906 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 979   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Human otoferlin sy  |
| C 907 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 980   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Caspase-6 protease  |
| C 908 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 981   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Cdc 2 kinase hamme  |
| C 909 | 14.2 | 0.8 | 21 | 1 | ABK61247  | Human EGF-R target  | 982   | 13.8 | 0.8 | 17 | 1 | AAAT50895 | Cdc 2 kinase hamme  |

|      |      |     |    |   |           |                     |       |      |     |    |   |          |                     |
|------|------|-----|----|---|-----------|---------------------|-------|------|-----|----|---|----------|---------------------|
| 983  | 13.8 | 0.8 | 18 | 1 | ABA03355  | Human clone WA15.1  | c1056 | 13.8 | 0.8 | 20 | 1 | AAV32934 | Human cyclin-depen  |
| 984  | 13.8 | 0.8 | 18 | 1 | AAI68749  | Human cystatin C'd  | c1057 | 13.8 | 0.8 | 20 | 1 | AAV05691 | Barnase open readi  |
| 985  | 13.8 | 0.8 | 18 | 1 | ABK14145  | Chlorinated ethyle  | 1058  | 13.8 | 0.8 | 20 | 1 | AAZ31303 | CCR5 gene inhibiti  |
| 986  | 13.8 | 0.8 | 18 | 1 | ABS64463  | Human TGF-beta bin  | 1059  | 13.8 | 0.8 | 20 | 1 | AAZ04231 | PCR primer used to  |
| 987  | 13.8 | 0.8 | 18 | 1 | ACD66643  | Human inhibitor-ka  | 1060  | 13.8 | 0.8 | 20 | 1 | AAZ02916 | PCR primer used to  |
| 988  | 13.8 | 0.8 | 18 | 1 | ADER4990  | Beer spoilage-asso  | c1061 | 13.8 | 0.8 | 20 | 1 | AAZ05240 | Deletion sequence   |
| 989  | 13.8 | 0.8 | 18 | 1 | ADEI3509  | HMA antisense olig  | c1062 | 13.8 | 0.8 | 20 | 1 | AAZ23549 | PCR primer used to  |
| 990  | 13.8 | 0.8 | 19 | 1 | AAT11974  | HLA class I allele  | 1063  | 13.8 | 0.8 | 20 | 1 | AAZ92036 | Human EST JRL4A1 a  |
| 991  | 13.8 | 0.8 | 19 | 1 | AAT01676  | Peptide nucleic ac  | 1064  | 13.8 | 0.8 | 20 | 1 | AAZ46520 | Human biallelic ma  |
| 992  | 13.8 | 0.8 | 19 | 1 | AAAT67044 | PCR primer DP17 fo  | c1065 | 13.8 | 0.8 | 20 | 1 | AAZ69753 | Human serine prote  |
| 993  | 13.8 | 0.8 | 19 | 1 | AAI10245  | Human biallelic po  | c1066 | 13.8 | 0.8 | 20 | 1 | AAZ61782 | PCR primer used to  |
| 994  | 13.8 | 0.8 | 19 | 1 | AAV01575  | H. capsulatum rRNA  | c1067 | 13.8 | 0.8 | 20 | 1 | AAZ89471 | Human jun N-termin  |
| 995  | 13.8 | 0.8 | 19 | 1 | AAI17891  | Anti-CMV oligonucle | c1068 | 13.8 | 0.8 | 20 | 1 | AAZ29848 | C. tropicalis CYP5  |
| 996  | 13.8 | 0.8 | 19 | 1 | AAO46627  | PCR primer Tusa4R u | 1069  | 13.8 | 0.8 | 20 | 1 | AAZ05532 | Anti-human Fas auc  |
| 997  | 13.8 | 0.8 | 19 | 1 | AAZ36588  | Probe hybridising   | 1070  | 13.8 | 0.8 | 20 | 1 | AAZ78243 | Human dopamine bet  |
| 998  | 13.8 | 0.8 | 19 | 1 | AAA82434  | cdk1 ribozyme bind  | c1071 | 13.8 | 0.8 | 20 | 1 | AAZ59944 | Human Lhx3 exon 6   |
| 999  | 13.8 | 0.8 | 19 | 1 | AAA82874  | cdk4 ribozyme bind  | 1072  | 13.8 | 0.8 | 20 | 1 | AAZ92148 | Dog genomic marker  |
| 1000 | 13.8 | 0.8 | 19 | 1 | AAA82874  | cdk3 ribozyme bind  | 1073  | 13.8 | 0.8 | 20 | 1 | AAZ66884 | Human cDNA clone-s  |
| 1001 | 13.8 | 0.8 | 19 | 1 | AAA84423  | Cyclin D3 ribozyme  | 1074  | 13.8 | 0.8 | 20 | 1 | AAZ95171 | L. monocytogenes 1  |
| 1002 | 13.8 | 0.8 | 19 | 1 | AAA82887  | cdk4 ribozyme bind  | c1075 | 13.8 | 0.8 | 20 | 1 | AAZ20451 | Human WMIF mRNA in  |
| 1003 | 13.8 | 0.8 | 19 | 1 | AAA83020  | cdk6 ribozyme bind  | 1076  | 13.8 | 0.8 | 20 | 1 | AAZ23201 | Immunostimulatory   |
| 1004 | 13.8 | 0.8 | 19 | 1 | AAA82748  | cdk3 ribozyme bind  | 1077  | 13.8 | 0.8 | 20 | 1 | AAZ99813 | Human fascin assoc  |
| 1005 | 13.8 | 0.8 | 19 | 1 | AAA82639  | cdk2 ribozyme bind  | c1078 | 13.8 | 0.8 | 20 | 1 | AAZ48588 | Canine retroviral   |
| 1006 | 13.8 | 0.8 | 19 | 1 | AAA82749  | cdk3 ribozyme bind  | c1079 | 13.8 | 0.8 | 20 | 1 | AAZ89128 | Human GABA(A) rece  |
| 1007 | 13.8 | 0.8 | 19 | 1 | AAZ91202  | Human multi drug r  | 1080  | 13.8 | 0.8 | 20 | 1 | AAZ76258 | PCR primer used to  |
| 1008 | 13.8 | 0.8 | 19 | 1 | AAZ91204  | Human multi drug r  | 1081  | 13.8 | 0.8 | 20 | 1 | AAZ80165 | Human IL4Ralpha ge  |
| 1009 | 13.8 | 0.8 | 19 | 1 | AAZ58036  | Cell-cycle depende  | c1082 | 13.8 | 0.8 | 20 | 1 | AAZ69712 | Gene 216 SSCP dete  |
| 1010 | 13.8 | 0.8 | 19 | 1 | AAZ59585  | Cyclin D3 ribozyme  | c1083 | 13.8 | 0.8 | 20 | 1 | AAZ72182 | Gene 216 SSCP dete  |
| 1011 | 13.8 | 0.8 | 19 | 1 | AAZ57801  | Cell-cycle depende  | 1084  | 13.8 | 0.8 | 20 | 1 | ABZ72182 | Rat GPCR ligand BV  |
| 1012 | 13.8 | 0.8 | 19 | 1 | AAZ58182  | Cell-cycle depende  | c1085 | 13.8 | 0.8 | 20 | 1 | ABZ71117 | PCR primer FV3 use  |
| 1013 | 13.8 | 0.8 | 19 | 1 | AAZ57891  | Cell-cycle depende  | c1086 | 13.8 | 0.8 | 20 | 1 | ABZ71117 | Rice lesion inhibi  |
| 1014 | 13.8 | 0.8 | 19 | 1 | AAZ57910  | Cell-cycle depende  | c1087 | 13.8 | 0.8 | 20 | 1 | AAZ46967 | Murine SACL1 gene-s |
| 1015 | 13.8 | 0.8 | 19 | 1 | AAZ58049  | Cell-cycle depende  | 1088  | 13.8 | 0.8 | 20 | 1 | AAZ97855 | Human talin antis   |
| 1016 | 13.8 | 0.8 | 19 | 1 | AAZ57596  | Cell-cycle depende  | 1089  | 13.8 | 0.8 | 20 | 1 | ABZ89264 | Angiogenesis inhib  |
| 1017 | 13.8 | 0.8 | 19 | 1 | AAZ57911  | Cell-cycle depende  | 1090  | 13.8 | 0.8 | 20 | 1 | ABZ78535 | Human LSR gene bia  |
| 1018 | 13.8 | 0.8 | 19 | 1 | ABZ67829  | Human casein kinas  | c1091 | 13.8 | 0.8 | 20 | 1 | ABZ41307 | T. tauschii/wheat   |
| 1019 | 13.8 | 0.8 | 19 | 1 | AAZ98357  | Chinese hamster HM  | c1092 | 13.8 | 0.8 | 20 | 1 | ABZ93162 | Human NOV8 RTQ-PCR  |
| 1020 | 13.8 | 0.8 | 19 | 1 | ABZ43700  | Human chromosome 1  | c1093 | 13.8 | 0.8 | 20 | 1 | ABZ51129 | Mouse caspase 6 an  |
| 1021 | 13.8 | 0.8 | 19 | 1 | ABZ97865  | Human UDP-glucuron  | 1094  | 13.8 | 0.8 | 20 | 1 | AAZ40400 | Human cytohesin-1   |
| 1022 | 13.8 | 0.8 | 19 | 1 | ABZ95971  | Probe #46 for assa  | 1095  | 13.8 | 0.8 | 20 | 1 | ABZ73952 | Human cytohesin-1   |
| 1023 | 13.8 | 0.8 | 19 | 1 | ABZ95954  | Probe #31 for assa  | 1096  | 13.8 | 0.8 | 20 | 1 | ABZ43708 | Human chromosome 1  |
| 1024 | 13.8 | 0.8 | 19 | 1 | ABZ95969  | Probe #44 for assa  | c1097 | 13.8 | 0.8 | 20 | 1 | ABZ37172 | Human MEKK4 antise  |
| 1025 | 13.8 | 0.8 | 19 | 1 | ABZ95961  | Probe #38 for assa  | c1098 | 13.8 | 0.8 | 20 | 1 | ABZ06434 | Cyclin 14-3-3 sign  |
| 1026 | 13.8 | 0.8 | 19 | 1 | ACF62642  | Cancer based on CY  | 1099  | 13.8 | 0.8 | 20 | 1 | ABZ30969 | Candida albicans G  |
| 1027 | 13.8 | 0.8 | 19 | 1 | ACF62643  | Cancer based on CY  | 1100  | 13.8 | 0.8 | 20 | 1 | ABZ31379 | Candida albicans G  |
| 1028 | 13.8 | 0.8 | 19 | 1 | ADZ21313  | MRP1 based cancer   | 1101  | 13.8 | 0.8 | 20 | 1 | ABK16359 | Candida tropicallis |
| 1029 | 13.8 | 0.8 | 19 | 1 | ADZ21314  | MRP1 based cancer   | c1102 | 13.8 | 0.8 | 20 | 1 | ABK16359 | Mouse adipose prot  |
| 1030 | 13.8 | 0.8 | 19 | 1 | ABZ88402  | Human UGT1A1 varia  | c1103 | 13.8 | 0.8 | 20 | 1 | ABZ44838 | Human raf kinase r  |
| 1031 | 13.8 | 0.8 | 19 | 1 | ABZ88403  | Human UGT1A1 varia  | 1104  | 13.8 | 0.8 | 20 | 1 | ABZ96039 | Mouse syndecan-1 r  |
| 1032 | 13.8 | 0.8 | 19 | 1 | ABZ97385  | Human MDRI variant  | 1105  | 13.8 | 0.8 | 20 | 1 | ABZ06488 | Human cytohesin-1   |
| 1033 | 13.8 | 0.8 | 19 | 1 | ABZ97385  | Human MDRI variant  | c1106 | 13.8 | 0.8 | 20 | 1 | ABZ95418 | Capture oligonucle  |
| 1034 | 13.8 | 0.8 | 19 | 1 | ABZ92576  | Human MDRI variant  | c1107 | 13.8 | 0.8 | 20 | 1 | ABZ94431 | Capture oligonucle  |
| 1035 | 13.8 | 0.8 | 19 | 1 | ABZ92577  | Human MDRI variant  | c1108 | 13.8 | 0.8 | 20 | 1 | ABZ50712 | Rat G protein-coup  |
| 1036 | 13.8 | 0.8 | 19 | 1 | ADD89803  | Hamster high mobil  | c1109 | 13.8 | 0.8 | 20 | 1 | ABZ86270 | Human oligonucleot  |
| 1037 | 13.8 | 0.8 | 19 | 1 | ADE27518  | Stearoyl-CoA desat  | c1110 | 13.8 | 0.8 | 20 | 1 | ABZ89410 | Human oligonucleot  |
| 1038 | 13.8 | 0.8 | 19 | 1 | ADE27528  | Stearoyl-CoA desat  | 1111  | 13.8 | 0.8 | 20 | 1 | ABZ97631 | Human IL5-R oligon  |
| 1039 | 13.8 | 0.8 | 20 | 1 | AAQ15432  | HPV-16 control pri  | 1112  | 13.8 | 0.8 | 20 | 1 | ABZ91330 | Human oligonucleot  |
| 1040 | 13.8 | 0.8 | 20 | 1 | AAQ15430  | HPV-16 primer cdi.  | c1113 | 13.8 | 0.8 | 20 | 1 | ABZ93366 | Human oligonucleot  |
| 1041 | 13.8 | 0.8 | 20 | 1 | AAQ058627 | HPV-6 probe. Synt   | c1114 | 13.8 | 0.8 | 20 | 1 | ABZ85750 | Human oligonucleot  |
| 1042 | 13.8 | 0.8 | 20 | 1 | AAQ345599 | Human papilloma vi  | 1115  | 13.8 | 0.8 | 20 | 1 | ABZ57272 | Human PDEF DNA, PC  |
| 1043 | 13.8 | 0.8 | 20 | 1 | AAQ345982 | PCR primer PV3(5')  | 1116  | 13.8 | 0.8 | 20 | 1 | ABZ80343 | Mouse Emx1 antisen  |
| 1044 | 13.8 | 0.8 | 20 | 1 | AAQ47398  | HPV16/pT713 primer  | 1117  | 13.8 | 0.8 | 20 | 1 | ABZ33976 | Human interleukin   |
| 1045 | 13.8 | 0.8 | 20 | 1 | AAQ05336  | Peptide transport   | c1118 | 13.8 | 0.8 | 20 | 1 | ACD42154 | Human raf-associat  |
| 1046 | 13.8 | 0.8 | 20 | 1 | AAI11661  | Primer for amplify  | c1119 | 13.8 | 0.8 | 20 | 1 | ABQ77205 | Human ABC12 exon    |
| 1047 | 13.8 | 0.8 | 20 | 1 | AAV78983  | Mouse Huntington's  | 1120  | 13.8 | 0.8 | 20 | 1 | ABX74975 | Human gene 216 pol  |
| 1048 | 13.8 | 0.8 | 20 | 1 | AAV03721  | Primer SHR-16 for   | c1121 | 13.8 | 0.8 | 20 | 1 | ABX75035 | Human gene 216 pol  |
| 1049 | 13.8 | 0.8 | 20 | 1 | AAV747350 | Variant #6 of univ  | 1122  | 13.8 | 0.8 | 20 | 1 | AAZ55476 | Human FGR-3 antis   |
| 1050 | 13.8 | 0.8 | 20 | 1 | AAV06254  | Puromycin-sensitiv  | c1123 | 13.8 | 0.8 | 20 | 1 | ACF57208 | Human LAMA3 revers  |
| 1051 | 13.8 | 0.8 | 20 | 1 | AAV33259  | HPV type 16 gene a  | 1124  | 13.8 | 0.8 | 20 | 1 | ACF05737 | FADD antisense PCR  |
| 1052 | 13.8 | 0.8 | 20 | 1 | AAV85967  | Mouse Irfp-3 cDNA p | 1125  | 13.8 | 0.8 | 20 | 1 | ACH03337 | Immunostimulatory   |
| 1053 | 13.8 | 0.8 | 20 | 1 | AAV43733  | Cancer associated   | 1126  | 13.8 | 0.8 | 20 | 1 | ADB37315 | Antisense oligonu   |
| 1054 | 13.8 | 0.8 | 20 | 1 | AAV54679  | Human papillomavir  | c1127 | 13.8 | 0.8 | 20 | 1 | ADB90016 | Antisense oligo (S  |
| 1055 | 13.8 | 0.8 | 20 | 1 | AAV69985  | Human c-jun protei  | 1128  | 13.8 | 0.8 | 20 | 1 | ADB81512 |                     |

|       |      |     |    |   |           |                    |       |      |     |    |   |           |                     |
|-------|------|-----|----|---|-----------|--------------------|-------|------|-----|----|---|-----------|---------------------|
| 1129  | 13.8 | 0.8 | 20 | 1 | ADB999096 | Human retinal pigm | 1202  | 13.6 | 0.8 | 20 | 1 | AAQ91248  | EAA5 receptor PCR   |
| c1130 | 13.8 | 0.8 | 20 | 1 | ADCG5775  | Human TGF-beta rec | c1203 | 13.6 | 0.8 | 20 | 1 | RAAT01753 | Peptide Nucleic ac  |
| 1131  | 13.8 | 0.8 | 20 | 1 | ADCG6807  | Tannin biosynthesi | c1204 | 13.6 | 0.8 | 20 | 1 | AAQ019937 | P16-specific mouse  |
| 1132  | 13.8 | 0.8 | 20 | 1 | ADCA5046  | Yeast CYP52A5A/B g | c1205 | 13.6 | 0.8 | 20 | 1 | AAQ81115  | Peptide nucleic ac  |
| 1133  | 13.8 | 0.8 | 20 | 1 | ADCA5816  | Yeast CYP52A5A/B g | c1206 | 13.6 | 0.8 | 20 | 1 | AAQ81119  | Peptide nucleic ac  |
| c1134 | 13.8 | 0.8 | 20 | 1 | ADCA5860  | Human CD81/TAPA-1  | c1207 | 13.6 | 0.8 | 20 | 1 | AAQ80945  | PCR primer to gene  |
| 1135  | 13.8 | 0.8 | 20 | 1 | ADCB4236  | Human papillomavir | c1208 | 13.6 | 0.8 | 20 | 1 | AAQ00729  | Multiple tumour su  |
| 1136  | 13.8 | 0.8 | 20 | 1 | ADCB4235  | Human papillomavir | c1209 | 13.6 | 0.8 | 20 | 1 | AAQ88741  | Human ICAM modifie  |
| c1137 | 13.8 | 0.8 | 20 | 1 | ADCB69057 | Angiogenesis inhib | c1210 | 13.6 | 0.8 | 20 | 1 | AAQ41336  | Human Fas ligand p  |
| 1138  | 13.8 | 0.8 | 20 | 1 | ADDA2212  | Human infertility  | c1211 | 13.6 | 0.8 | 20 | 1 | AAQ99517  | Human Fas ligand p  |
| c1139 | 13.8 | 0.8 | 20 | 1 | ADSE28941 | Reverse Ag2597 RT- | c1212 | 13.6 | 0.8 | 20 | 1 | AAQ99516  | Antisense oligonuc  |
| 1140  | 13.8 | 0.8 | 20 | 1 | ADSE2227  | C. tropicalis CYP5 | c1213 | 13.6 | 0.8 | 20 | 1 | AAQ44449  | ICAM antisense com  |
| 1141  | 13.8 | 0.8 | 20 | 1 | ADSE64291 | HPV6 typing probe  | c1214 | 13.6 | 0.8 | 20 | 1 | AAQ43250  | ICAM expression in  |
| 1142  | 13.8 | 0.8 | 21 | 1 | AAQ03910  | HCY primer P6. Sy  | c1215 | 13.6 | 0.8 | 20 | 1 | AAQ15587  | Primer for Min mut  |
| 1143  | 13.8 | 0.8 | 21 | 1 | AAQ27035  | Primer for hepatit | c1216 | 13.6 | 0.8 | 20 | 1 | AAQ30227  | Antisense oligonuc  |
| 1144  | 13.8 | 0.8 | 21 | 1 | AAV05593  | L1 consensus prime | c1217 | 13.6 | 0.8 | 20 | 1 | AAQ24204  | Phosphomonoester    |
| 1145  | 13.8 | 0.8 | 21 | 1 | AAQ56381  | Glucose oxidase se | c1218 | 13.6 | 0.8 | 20 | 1 | AAQ27491  | Human c-rai kinase  |
| c1146 | 13.8 | 0.8 | 21 | 1 | AAQ56141  | Plasmid VEPL/GOD-  | c1219 | 13.6 | 0.8 | 20 | 1 | AAQ27491  | Human potassium ch  |
| c1147 | 13.8 | 0.8 | 21 | 1 | AAQ57082  | Human papilloma vi | c1220 | 13.6 | 0.8 | 20 | 1 | AAQ161877 | Complementary humi  |
| 1148  | 13.8 | 0.8 | 21 | 1 | AAQ10818  | Family 2 bFGF DNA  | c1221 | 13.6 | 0.8 | 20 | 1 | AAQ48972  | P16 promoter speci  |
| c1149 | 13.8 | 0.8 | 21 | 1 | AAQ00342  | Chemokine receptor | c1222 | 13.6 | 0.8 | 20 | 1 | AAQ72304  | Human ox simian im  |
| c1150 | 13.8 | 0.8 | 21 | 1 | AAQ35284  | HPV typing probe M | c1223 | 13.6 | 0.8 | 20 | 1 | AAQ98014  | Forward PCR for cys |
| 1151  | 13.8 | 0.8 | 21 | 1 | AAQ44768  | Human papillomavir | c1224 | 13.6 | 0.8 | 20 | 1 | AAQ74038  | Forward PCR primer  |
| 1152  | 13.8 | 0.8 | 21 | 1 | AAQ78006  | Human papillomavir | c1225 | 13.6 | 0.8 | 20 | 1 | AAQ94038  | Human c-rai kinase  |
| 1153  | 13.8 | 0.8 | 21 | 1 | AAV27016  | Homo sapiens gp-Fy | c1226 | 13.6 | 0.8 | 20 | 1 | AAQ53844  | Unmethylated CpG d  |
| 1154  | 13.8 | 0.8 | 21 | 1 | AAV17380  | Probe MY12 for hum | c1227 | 13.6 | 0.8 | 20 | 1 | AAQ47686  | Primer #2 for huma  |
| 1155  | 13.8 | 0.8 | 21 | 1 | AAV38534  | Human TSC gene exo | c1228 | 13.6 | 0.8 | 20 | 1 | AAQ60732  | Human c-fos protei  |
| 1156  | 13.8 | 0.8 | 21 | 1 | AAV40603  | Human polymorphic  | c1229 | 13.6 | 0.8 | 20 | 1 | AAQ69958  | Human MSL1 and MTS  |
| c1157 | 13.8 | 0.8 | 21 | 1 | AAZ25918  | Human prostate spe | c1230 | 13.6 | 0.8 | 20 | 1 | AAV11263  | PRK 19 gene specif  |
| 1158  | 13.8 | 0.8 | 21 | 1 | AAZ30746  | Human plasminogen  | c1231 | 13.6 | 0.8 | 20 | 1 | AAZ18169  | PRK 18 gene specif  |
| 1159  | 13.8 | 0.8 | 21 | 1 | AAQ78886  | Human ABC1 gene ex | c1232 | 13.6 | 0.8 | 20 | 1 | AAZ18165  | PRK 17 gene specif  |
| c1160 | 13.8 | 0.8 | 21 | 1 | AAQ69272  | PCR primer used to | c1233 | 13.6 | 0.8 | 20 | 1 | AAZ20188  | Pregnancy associat  |
| c1161 | 13.8 | 0.8 | 21 | 1 | AAZ80648  | PCR primer used to | c1234 | 13.6 | 0.8 | 20 | 1 | AAZ211521 | Human c-rai kinase  |
| c1162 | 13.8 | 0.8 | 21 | 1 | AAZ60652  | Human biallelic ma | c1235 | 13.6 | 0.8 | 20 | 1 | AAZ11521  | Human GABA B recep  |
| 1163  | 13.8 | 0.8 | 21 | 1 | AAZ771136 | Human biallelic ma | c1236 | 13.6 | 0.8 | 20 | 1 | AAZ07001  | Human iPKF-2 antis  |
| 1164  | 13.8 | 0.8 | 21 | 1 | AAZ771136 | Human biallelic ma | c1237 | 13.6 | 0.8 | 20 | 1 | AAZ58122  | Human iPKF-2 antis  |
| c1165 | 13.8 | 0.8 | 21 | 1 | AAZ95402  | Human gene single  | c1238 | 13.6 | 0.8 | 20 | 1 | AAZ58144  | Human iPKF-2 antis  |
| c1166 | 13.8 | 0.8 | 21 | 1 | AAZ95850  | Human gene single  | c1239 | 13.6 | 0.8 | 20 | 1 | AAZ74243  | CPG-N motif O-ODN   |
| c1167 | 13.8 | 0.8 | 21 | 1 | AAZ97421  | Human gene single  | c1240 | 13.6 | 0.8 | 20 | 1 | AAZ74294  | ICAM-1 antisense o  |
| 1168  | 13.8 | 0.8 | 21 | 1 | AAZ96964  | Human gene single  | c1241 | 13.6 | 0.8 | 20 | 1 | AAZ70608  | PCR primer used to  |
| c1169 | 13.8 | 0.8 | 21 | 1 | AAZ96582  | Human gene single  | c1242 | 13.6 | 0.8 | 20 | 1 | AAZ02575  | PCR primer used to  |
| c1170 | 13.8 | 0.8 | 21 | 1 | AAZ93032  | Partial exon 7 cor | c1243 | 13.6 | 0.8 | 20 | 1 | AAZ01495  | PCR primer used to  |
| c1171 | 13.8 | 0.8 | 21 | 1 | AAH40230  | SNP specific lower | c1244 | 13.6 | 0.8 | 20 | 1 | AAZ05818  | PCR primer used to  |
| c1172 | 13.8 | 0.8 | 21 | 1 | AAZ70928  | bFGF DNA ligand #6 | c1245 | 13.6 | 0.8 | 20 | 1 | AAZ02583  | Antisense oligonuc  |
| c1173 | 13.8 | 0.8 | 21 | 1 | AAZ55160  | Probe used to iden | c1246 | 13.6 | 0.8 | 20 | 1 | AAZ00531  | Primer #2 for ampl  |
| c1174 | 13.8 | 0.8 | 21 | 1 | AAH99038  | Human polymorphic  | c1247 | 13.6 | 0.8 | 20 | 1 | AAZ10728  | Forward PCR primer  |
| 1175  | 13.8 | 0.8 | 21 | 1 | ABA01349  | YMDD oligonucleoti | c1248 | 13.6 | 0.8 | 20 | 1 | AAZ10728  | Forward PCR primer  |
| 1176  | 13.8 | 0.8 | 21 | 1 | ABA15520  | DNA probe for huma | c1249 | 13.6 | 0.8 | 20 | 1 | AAZ56166  | Human alpha-7 nico  |
| c1177 | 13.8 | 0.8 | 21 | 1 | ABK65477  | Human single nucle | c1250 | 13.6 | 0.8 | 20 | 1 | AAZ09078  | Tumour necrosis fa  |
| c1178 | 13.8 | 0.8 | 21 | 1 | ABS60808  | Human polymorphism | c1251 | 13.6 | 0.8 | 20 | 1 | AAZ95535  | PCR primer used to  |
| c1179 | 13.8 | 0.8 | 21 | 1 | ABS60583  | Human polymorphism | c1252 | 13.6 | 0.8 | 20 | 1 | AAZ92771  | PCR primer used to  |
| c1180 | 13.8 | 0.8 | 21 | 1 | ABS60582  | Human polymorphism | c1253 | 13.6 | 0.8 | 20 | 1 | AAZ94323  | PCR primer used to  |
| 1181  | 13.8 | 0.8 | 21 | 1 | ABS99452  | Anti-human Ail1m m | c1254 | 13.6 | 0.8 | 20 | 1 | AAZ94068  | PCR primer used to  |
| 1182  | 13.8 | 0.8 | 21 | 1 | AAD45724  | Mycobacterium sp.  | c1255 | 13.6 | 0.8 | 20 | 1 | AAZ96741  | PCR primer used to  |
| c1183 | 13.8 | 0.8 | 21 | 1 | ABT06423  | Cyclin 14-3-3 sigm | c1256 | 13.6 | 0.8 | 20 | 1 | AAZ96621  | PCR primer used to  |
| 1184  | 13.8 | 0.8 | 21 | 1 | ABS97470  | DMS:acceptor oxido | c1257 | 13.6 | 0.8 | 20 | 1 | AAZ95259  | PCR primer used to  |
| c1185 | 13.8 | 0.8 | 21 | 1 | ABK53783  | Endothelin convert | c1258 | 13.6 | 0.8 | 20 | 1 | AAZ08858  | 3' RACE nested pri  |
| 1186  | 13.8 | 0.8 | 21 | 1 | ABK94356  | Endothelin convert | c1259 | 13.6 | 0.8 | 20 | 1 | AAZ95856  | Mouse P16 gene pri  |
| c1187 | 13.8 | 0.8 | 21 | 1 | ABK94355  | Endothelin convert | c1260 | 13.6 | 0.8 | 20 | 1 | AAZ57446  | Phosphothioate o    |
| 1188  | 13.8 | 0.8 | 21 | 1 | ABQ80134  | Probe BDM0080P, id | c1261 | 13.6 | 0.8 | 20 | 1 | AAZ60155  | Human PPARbeta gen  |
| 1189  | 13.8 | 0.8 | 21 | 1 | ABQ80161  | Probe BDM0080P, id | c1262 | 13.6 | 0.8 | 20 | 1 | AAZ59793  | Primer for p38 nuc  |
| c1190 | 13.8 | 0.8 | 21 | 1 | AAZ53951  | Human papillomavir | c1263 | 13.6 | 0.8 | 20 | 1 | AAZ48795  | PCR primer for mou  |
| c1191 | 13.8 | 0.8 | 21 | 1 | ADC51528  | Potential matrix m | c1264 | 13.6 | 0.8 | 20 | 1 | AAZ39994  | PCR primer for hum  |
| c1192 | 13.8 | 0.8 | 21 | 1 | ADC72204  | Human stearyl coen | c1265 | 13.6 | 0.8 | 20 | 1 | AAZ98298  | Plasmodium DBL fam  |
| 1193  | 13.8 | 0.8 | 15 | 1 | AAZ41783  | Human MC2R gene AS | c1266 | 13.6 | 0.8 | 20 | 1 | AAZ48638  | ICAM-1 antisense i  |
| 1194  | 13.6 | 0.8 | 20 | 1 | AAQ06909  | MY43 nucleotide c  | c1267 | 13.6 | 0.8 | 20 | 1 | AAZ39378  | Mouse P16 PCR prim  |
| 1195  | 13.6 | 0.8 | 20 | 1 | AAQ13687  | N-ras gene codon 1 | c1268 | 13.6 | 0.8 | 20 | 1 | AAZ61834  | Antisense oligonuc  |
| c1196 | 13.6 | 0.8 | 20 | 1 | AAQ22643  | Antisense oligonuc | c1269 | 13.6 | 0.8 | 20 | 1 | AAZ77261  | Human biallelic ma  |
| c1197 | 13.6 | 0.8 | 20 | 1 | AAQ66488  | K-ras codon 12 MTO | c1270 | 13.6 | 0.8 | 20 | 1 | AAZ14488  | Primer #13 in inve  |
| c1198 | 13.6 | 0.8 | 20 | 1 | AAQ44522  | Antisense oligonuc | c1271 | 13.6 | 0.8 | 20 | 1 | AAZ09667  | Human SHP-1 antise  |
| c1199 | 13.6 | 0.8 | 20 | 1 | AAQ67592  | Sequence of PCR pr | c1272 | 13.6 | 0.8 | 20 | 1 | AAZ63937  | PCR primer for mur  |
| c1200 | 13.6 | 0.8 | 20 | 1 | AAQ71023  | PCR primer for the | c1273 | 13.6 | 0.8 | 20 | 1 | AAZ49357  | ICAM-1 targeted p   |
| c1201 | 13.6 | 0.8 | 20 | 1 | AAQ71501  | Probe for identifi | c1274 | 13.6 | 0.8 | 20 | 1 | AAZ44889  | Human K-ras PCR p   |



|       |      |     |    |   |          |                     |       |      |     |    |   |           |                     |
|-------|------|-----|----|---|----------|---------------------|-------|------|-----|----|---|-----------|---------------------|
| c1275 | 13.6 | 0.8 | 20 | 1 | AAZ89211 | Human glyceraldhy   | 1348  | 13.6 | 0.8 | 20 | 1 | ABA99824  | Murine capn12 exon  |
| c1276 | 13.6 | 0.8 | 20 | 1 | AAA11188 | Mouse multiple tum  | c1349 | 13.6 | 0.8 | 20 | 1 | ABN97923  | GAPDH amplificatio  |
| c1277 | 13.6 | 0.8 | 20 | 1 | AAZ48909 | Human ICAM-1 antis  | c1350 | 13.6 | 0.8 | 20 | 1 | ABK43252  | Human HKG1 exon 9   |
| c1278 | 13.6 | 0.8 | 20 | 1 | AAC68206 | Gene typing PCR pr  | c1351 | 13.6 | 0.8 | 20 | 1 | ABN80949  | Mouse caspase 7 ph  |
| c1279 | 13.6 | 0.8 | 20 | 1 | AAC66586 | Gene typing PCR pr  | c1352 | 13.6 | 0.8 | 20 | 1 | ABN80937  | Mouse caspase 7 ph  |
| c1280 | 13.6 | 0.8 | 20 | 1 | AAA94747 | Oligonucleotide #1  | c1353 | 13.6 | 0.8 | 20 | 1 | ABD39347  | Human Von Willebra  |
| c1281 | 13.6 | 0.8 | 20 | 1 | AAZ73499 | Human c-raf kinase  | c1354 | 13.6 | 0.8 | 20 | 1 | ABQ74705  | MAC2-BP gene sense  |
| c1282 | 13.6 | 0.8 | 20 | 1 | AAZ60947 | Interleukin 1 rece  | c1355 | 13.6 | 0.8 | 20 | 1 | ABK71129  | Mouse HYPLIP1 locu  |
| c1283 | 13.6 | 0.8 | 20 | 1 | AAC33137 | Cell cycle regulat  | c1356 | 13.6 | 0.8 | 20 | 1 | AAI46755  | ICAM antisense oli  |
| c1284 | 13.6 | 0.8 | 20 | 1 | AAC79550 | Murine p38beta ant  | c1357 | 13.6 | 0.8 | 20 | 1 | AAI44724  | Human c-raf kinase  |
| c1285 | 13.6 | 0.8 | 20 | 1 | AAZ97969 | B. brevis NRPS gen  | c1358 | 13.6 | 0.8 | 20 | 1 | ABQ78911  | S. roseosporus dap  |
| c1286 | 13.6 | 0.8 | 20 | 1 | AAZ76673 | Bone resorption mo  | c1359 | 13.6 | 0.8 | 20 | 1 | ABX97255  | Human NOV-associat  |
| c1287 | 13.6 | 0.8 | 20 | 1 | AAI47461 | Human glycyogen syn | c1360 | 13.6 | 0.8 | 20 | 1 | AAI18551  | Mouse AGP-3 PCR pr  |
| c1288 | 13.6 | 0.8 | 20 | 1 | ABA44587 | Oligonucleotide #7  | c1361 | 13.6 | 0.8 | 20 | 1 | ABL94308  | Human C/EBP beta p  |
| c1289 | 13.6 | 0.8 | 20 | 1 | AAC81175 | Human bcl-2 phosph  | c1362 | 13.6 | 0.8 | 20 | 1 | ABR49114  | Human KDR/Flk-1 mu  |
| c1290 | 13.6 | 0.8 | 20 | 1 | AAZ58196 | Primer #16. Homo    | c1363 | 13.6 | 0.8 | 20 | 1 | ABI97222  | Capture oligonucle  |
| c1291 | 13.6 | 0.8 | 20 | 1 | AAI11340 | Human cot oncogene  | c1364 | 13.6 | 0.8 | 20 | 1 | AAI20906  | Human peptide tran  |
| c1292 | 13.6 | 0.8 | 20 | 1 | AAZ45859 | Human PARP-2 antis  | c1365 | 13.6 | 0.8 | 20 | 1 | ABK67749  | Human transglutami  |
| c1293 | 13.6 | 0.8 | 20 | 1 | AAZ45704 | Human PARP-2 antis  | c1366 | 13.6 | 0.8 | 20 | 1 | ABQ81403  | Arabidopsis AINTEG  |
| c1294 | 13.6 | 0.8 | 20 | 1 | AAC92774 | Human hnRNP A1 pho  | c1367 | 13.6 | 0.8 | 20 | 1 | ABT08433  | Human Mac2-BP prom  |
| c1295 | 13.6 | 0.8 | 20 | 1 | AAZ60944 | Anti-ICAM-1 oligon  | c1368 | 13.6 | 0.8 | 20 | 1 | ABE64605  | Recombinant blood   |
| c1296 | 13.6 | 0.8 | 20 | 1 | AAZ74734 | Mouse sirp3 gene s  | c1369 | 13.6 | 0.8 | 20 | 1 | AAI53075  | BAGE marker gene s  |
| c1297 | 13.6 | 0.8 | 20 | 1 | AAI17410 | Human SFRP4 gene s  | c1370 | 13.6 | 0.8 | 20 | 1 | ABX78206  | Human bifunctional  |
| c1298 | 13.6 | 0.8 | 20 | 1 | AAZ02589 | PCR primer RP.2(re  | c1371 | 13.6 | 0.8 | 20 | 1 | ABZ90450  | Human oligonucleot  |
| c1299 | 13.6 | 0.8 | 20 | 1 | AAZ09545 | FITC-labeled ICAM   | c1372 | 13.6 | 0.8 | 20 | 1 | ABZ92603  | Human oligonucleot  |
| c1300 | 13.6 | 0.8 | 20 | 1 | AAH42979 | PCR primer used to  | c1373 | 13.6 | 0.8 | 20 | 1 | ABZ88825  | Human oligonucleot  |
| c1301 | 13.6 | 0.8 | 20 | 1 | AAZ99116 | Immunostimulatory   | c1374 | 13.6 | 0.8 | 20 | 1 | ABZ87133  | Human oligonucleot  |
| c1302 | 13.6 | 0.8 | 20 | 1 | AAH1775  | p38 gene PCR prime  | c1375 | 13.6 | 0.8 | 20 | 1 | ABZ92417  | Human oligonucleot  |
| c1303 | 13.6 | 0.8 | 20 | 1 | AAH23850 | Human antileukopro  | c1376 | 13.6 | 0.8 | 20 | 1 | ABZ88076  | Human oligonucleot  |
| c1304 | 13.6 | 0.8 | 20 | 1 | AAC62058 | PCR primer for nuc  | c1377 | 13.6 | 0.8 | 20 | 1 | ABZ88832  | Human oligonucleot  |
| c1305 | 13.6 | 0.8 | 20 | 1 | AAZ04717 | Mouse p16beta cDNA  | c1378 | 13.6 | 0.8 | 20 | 1 | ABZ84865  | Human oligonucleot  |
| c1306 | 13.6 | 0.8 | 20 | 1 | AAH48603 | Human faslin assoc  | c1379 | 13.6 | 0.8 | 20 | 1 | ABZ85601  | Human oligonucleot  |
| c1307 | 13.6 | 0.8 | 20 | 1 | AAZ44442 | Primer for amplif   | c1380 | 13.6 | 0.8 | 20 | 1 | ABZ86435  | Human oligonucleot  |
| c1308 | 13.6 | 0.8 | 20 | 1 | AAC83096 | Primer used to amp  | c1381 | 13.6 | 0.8 | 20 | 1 | ABZ92850  | Human oligonucleot  |
| c1309 | 13.6 | 0.8 | 20 | 1 | AAH78394 | Probe used to dete  | c1382 | 13.6 | 0.8 | 20 | 1 | ABZ75967  | ICAM-1 gene target  |
| c1310 | 13.6 | 0.8 | 20 | 1 | AAI1919  | Human iPFK-2 DNA s  | c1383 | 13.6 | 0.8 | 20 | 1 | ABZ82217  | Human HSL chimeric  |
| c1311 | 13.6 | 0.8 | 20 | 1 | AAI1920  | Human iPFK-2 DNA s  | c1384 | 13.6 | 0.8 | 20 | 1 | ABZ82217  | ICAM-1 inhibitory   |
| c1312 | 13.6 | 0.8 | 20 | 1 | AAZ74084 | Primer #18. Homo    | c1385 | 13.6 | 0.8 | 20 | 1 | ACC62163  | Human allopeptein   |
| c1313 | 13.6 | 0.8 | 20 | 1 | AAZ95418 | Primer used to amp  | c1386 | 13.6 | 0.8 | 20 | 1 | ABX13023  | Oxidative stress d  |
| c1314 | 13.6 | 0.8 | 20 | 1 | AAH49228 | Anti-ICAM oligonuc  | c1387 | 13.6 | 0.8 | 20 | 1 | ABX33984  | Human interleukin   |
| c1315 | 13.6 | 0.8 | 20 | 1 | AAZ87785 | DNA 20-mer ASO (an  | c1388 | 13.6 | 0.8 | 20 | 1 | ABZ83986  | Toxicologically re  |
| c1316 | 13.6 | 0.8 | 20 | 1 | AAZ87788 | Human intracellular | c1389 | 13.6 | 0.8 | 20 | 1 | ADA26797  | Human PRL-3 forwar  |
| c1317 | 13.6 | 0.8 | 20 | 1 | AAZ22310 | Human COL3A2 PCR p  | c1390 | 13.6 | 0.8 | 20 | 1 | ACD42082  | Antisense oligonuc  |
| c1318 | 13.6 | 0.8 | 20 | 1 | ABK12803 | Intracellular-adhe  | c1391 | 13.6 | 0.8 | 20 | 1 | ACQ80152  | Right primer DBM00  |
| c1319 | 13.6 | 0.8 | 20 | 1 | ABL01636 | ICAM-1 targeted an  | c1392 | 13.6 | 0.8 | 20 | 1 | ACC49159  | ICAM-1 inhibitory   |
| c1320 | 13.6 | 0.8 | 20 | 1 | ABK86419 | HHV4 nuclear prot   | c1393 | 13.6 | 0.8 | 20 | 1 | ACA97206  | Vpr-driven constru  |
| c1321 | 13.6 | 0.8 | 20 | 1 | AAZ41528 | Collagenase 1 Gene  | c1394 | 13.6 | 0.8 | 20 | 1 | ADA44765  | Antisense oligonuc  |
| c1322 | 13.6 | 0.8 | 20 | 1 | ABL59571 | ARF/HK33 protein r  | c1395 | 13.6 | 0.8 | 20 | 1 | ABZ77539  | Nucleotide sequenc  |
| c1323 | 13.6 | 0.8 | 20 | 1 | ABL52358 | Mouse FLIP-c chime  | c1396 | 13.6 | 0.8 | 20 | 1 | ADA00242  | p38 gene PCR prime  |
| c1324 | 13.6 | 0.8 | 20 | 1 | ABQ74294 | Human leukocyte an  | c1397 | 13.6 | 0.8 | 20 | 1 | ABZ23813  | EGFR mRNA inhibiti  |
| c1325 | 13.6 | 0.8 | 20 | 1 | AAZ97894 | Human SAC1 gene-sp  | c1398 | 13.6 | 0.8 | 20 | 1 | ABZ78149  | Murine p38-alpha M  |
| c1326 | 13.6 | 0.8 | 20 | 1 | ABL42954 | Maturation/activat  | c1399 | 13.6 | 0.8 | 20 | 1 | ABZ74963  | Human p70 S6 kinase |
| c1327 | 13.6 | 0.8 | 20 | 1 | ABK30510 | Human glioma-assoc  | c1400 | 13.6 | 0.8 | 20 | 1 | ABT43268  | Neuroblastoma-rela  |
| c1328 | 13.6 | 0.8 | 20 | 1 | ABZ77759 | Argicogenesis inhib | c1401 | 13.6 | 0.8 | 20 | 1 | ABQ80265  | FLT-4 primer #2.    |
| c1329 | 13.6 | 0.8 | 20 | 1 | ABL39008 | Immunostimulatory   | c1402 | 13.6 | 0.8 | 20 | 1 | ACF33771  | Human CREB phospho  |
| c1330 | 13.6 | 0.8 | 20 | 1 | ABZ65410 | Human/mouse Protei  | c1403 | 13.6 | 0.8 | 20 | 1 | ABT323390 | Neuroblastoma-rela  |
| c1331 | 13.6 | 0.8 | 20 | 1 | ABZ97491 | ICAM-1 targeted an  | c1404 | 13.6 | 0.8 | 20 | 1 | ADA20854  | Human BAX chimeric  |
| c1332 | 13.6 | 0.8 | 20 | 1 | ABK68325 | Mouse HYPLIP1 locu  | c1405 | 13.6 | 0.8 | 20 | 1 | ADA20960  | Mouse BAX chimeric  |
| c1333 | 13.6 | 0.8 | 20 | 1 | ABK85293 | Human PTP1B antise  | c1406 | 13.6 | 0.8 | 20 | 1 | ACF39671  | MHC class II trans  |
| c1334 | 13.6 | 0.8 | 20 | 1 | ABN79624 | Human FasL chimeri  | c1407 | 13.6 | 0.8 | 20 | 1 | AAI61864  | Human ETBR-LP-2 an  |
| c1335 | 13.6 | 0.8 | 20 | 1 | ABQ79630 | iPFK-2-specific ol  | c1408 | 13.6 | 0.8 | 20 | 1 | AAI61863  | Human ETBR-LP-2 an  |
| c1336 | 13.6 | 0.8 | 20 | 1 | ABQ79631 | iPFK-2-specific ol  | c1409 | 13.6 | 0.8 | 20 | 1 | ACQ99549  | Immunostimulatory   |
| c1337 | 13.6 | 0.8 | 20 | 1 | ABL44330 | Human chromosome 1  | c1410 | 13.6 | 0.8 | 20 | 1 | ADA15368  | Mouse HYPLIP1 locu  |
| c1338 | 13.6 | 0.8 | 20 | 1 | ABL43558 | Human chromosome 1  | c1411 | 13.6 | 0.8 | 20 | 1 | ACF04246  | Murine embryonic c  |
| c1339 | 13.6 | 0.8 | 20 | 1 | ABT15935 | Human helicase-mol  | c1412 | 13.6 | 0.8 | 20 | 1 | ACH66607  | Sense PCR primer u  |
| c1340 | 13.6 | 0.8 | 20 | 1 | AAI67702 | SHH patched recept  | c1413 | 13.6 | 0.8 | 20 | 1 | ABZ95930  | Mouse HYPLIP1 PCR   |
| c1341 | 13.6 | 0.8 | 20 | 1 | ABL46178 | Human ICAM-1 antis  | c1414 | 13.6 | 0.8 | 20 | 1 | ADB36618  | Immunostimulatory   |
| c1342 | 13.6 | 0.8 | 20 | 1 | ABK24601 | BIF2AK3 gene sequ   | c1415 | 13.6 | 0.8 | 20 | 1 | ADB65935  | Clone specific PCR  |
| c1343 | 13.6 | 0.8 | 20 | 1 | ABT06761 | Nucleic acid detec  | c1416 | 13.6 | 0.8 | 20 | 1 | ADC65807  | Mouse TGF-beta rec  |
| c1344 | 13.6 | 0.8 | 20 | 1 | ABT06751 | Nucleic acid detec  | c1417 | 13.6 | 0.8 | 20 | 1 | ADC10516  | Human NOVX polypep  |
| c1345 | 13.6 | 0.8 | 20 | 1 | ABT05760 | Nucleic acid detec  | c1418 | 13.6 | 0.8 | 20 | 1 | ADC38989  | Human ICAM-1 targe  |
| c1346 | 13.6 | 0.8 | 20 | 1 | ABQ62337 | Human syntaxin 4 i  | c1419 | 13.6 | 0.8 | 20 | 1 | AAZ58980  | Human ICAM-1 antis  |
| c1347 | 13.6 | 0.8 | 20 | 1 | ABZ31505 | Candida albicans G  | c1420 | 13.6 | 0.8 | 20 | 1 | AAZ58980  | AS-IPFK-2 (A) anti  |



|       |      |     |    |   |           |                    |       |      |     |    |   |          |                    |
|-------|------|-----|----|---|-----------|--------------------|-------|------|-----|----|---|----------|--------------------|
| c1421 | 13.6 | 0.8 | 20 | 1 | AAD59445  | S-1BFX-2 (A) sense | c1494 | 13.4 | 0.8 | 17 | 1 | ACD55495 | HBV amberyze subs  |
| 1422  | 13.6 | 0.8 | 20 | 1 | ADD22540  | Flatfish rhabdovir | c1495 | 13.4 | 0.8 | 17 | 1 | ACD55494 | HBV amberyze subs  |
| 1423  | 13.6 | 0.8 | 20 | 1 | ADD68463  | SNP typing-related | c1496 | 13.4 | 0.8 | 17 | 1 | ACD58065 | HCV DNazyme substr |
| c1424 | 13.6 | 0.8 | 21 | 1 | AAD26102  | Human polymorphic  | 1497  | 13.4 | 0.8 | 17 | 1 | ACD64603 | HCV minus strand D |
| 1425  | 13.6 | 0.8 | 21 | 1 | AAF97537  | Human gene single  | 1498  | 13.4 | 0.8 | 17 | 1 | ACD51807 | HBV inozyme substr |
| c1426 | 13.4 | 0.8 | 15 | 1 | AAQ24934  | Synthetic primer   | c1499 | 13.4 | 0.8 | 17 | 1 | ACD55493 | HBV amberyze subs  |
| 1427  | 13.4 | 0.8 | 15 | 1 | AAT55034  | Human rela hamerh  | 1500  | 13.4 | 0.8 | 17 | 1 | ACD54462 | HBV DNazyme substr |
| c1428 | 13.4 | 0.8 | 15 | 1 | AAV5669   | Human fit-1 and KD | c1501 | 13.4 | 0.8 | 17 | 1 | ACD64765 | Murine oligonucleo |
| c1429 | 13.4 | 0.8 | 15 | 1 | AAV42654  | DNA sequence of th | 1502  | 13.4 | 0.8 | 17 | 1 | ACC66050 | Murine oligonucleo |
| c1430 | 13.4 | 0.8 | 15 | 1 | AAV42817  | Probe used to iden | c1503 | 13.4 | 0.8 | 17 | 1 | ACC68168 | Murine oligonucleo |
| c1431 | 13.4 | 0.8 | 15 | 1 | AAV31178  | Tag sequence of a  | c1504 | 13.4 | 0.8 | 17 | 1 | ABX16354 | Human checkpoint g |
| 1432  | 13.4 | 0.8 | 15 | 1 | AAA92356  | Original DNA templ | 1505  | 13.4 | 0.8 | 17 | 1 | ADC37957 | Human AMLPia scan  |
| c1433 | 13.4 | 0.8 | 15 | 1 | AAAT39402 | Acid/base ortholog | 1506  | 13.4 | 0.8 | 17 | 1 | ADC37955 | Human AMLPia scan  |
| c1434 | 13.4 | 0.8 | 15 | 1 | AAF50411  | IGF-1 oligonucleot | 1507  | 13.4 | 0.8 | 17 | 1 | ADC37956 | Human AMLPia scan  |
| c1435 | 13.4 | 0.8 | 15 | 1 | AAF46589  | IGF-1 oligonucleot | 1508  | 13.4 | 0.8 | 18 | 1 | AAV50714 | Rabbit CEMP hairpi |
| c1436 | 13.4 | 0.8 | 15 | 1 | AAF50410  | IGF-1 oligonucleot | c1509 | 13.4 | 0.8 | 18 | 1 | AAV12786 | Patient-specific C |
| c1437 | 13.4 | 0.8 | 15 | 1 | AAF50702  | IGF-1 oligonucleot | c1510 | 13.4 | 0.8 | 18 | 1 | AAV73903 | Human HLA-A2 A*02  |
| 1438  | 13.4 | 0.8 | 15 | 1 | ABZ34171  | HIV-1 reverse tran | 1511  | 13.4 | 0.8 | 18 | 1 | AAV86679 | Human chromosome 1 |
| c1439 | 13.4 | 0.8 | 15 | 1 | ABK32132  | Human colon cancer | c1512 | 13.4 | 0.8 | 18 | 1 | AAZ31848 | Human G-alpha-13 a |
| 1440  | 13.4 | 0.8 | 15 | 1 | ABK32677  | Ineffective anti-H | 1513  | 13.4 | 0.8 | 18 | 1 | AAV79315 | Primer F72 for iso |
| c1441 | 13.4 | 0.8 | 17 | 1 | AAAT1976  | CMV antisense olig | 1514  | 13.4 | 0.8 | 18 | 1 | AAZ74421 | Human biallelic ma |
| c1442 | 13.4 | 0.8 | 17 | 1 | AAAT01678 | Peptide nucleic ac | c1515 | 13.4 | 0.8 | 18 | 1 | AAH40049 | SNP specific upper |
| c1443 | 13.4 | 0.8 | 17 | 1 | AAAG9179  | Human fit1 VEGF re | c1516 | 13.4 | 0.8 | 18 | 1 | ABK52758 | Nuclease resistant |
| 1444  | 13.4 | 0.8 | 17 | 1 | AAV71471  | Human KDR VEGF rec | c1517 | 13.4 | 0.8 | 18 | 1 | ABL44832 | Human chromosome 1 |
| 1445  | 13.4 | 0.8 | 17 | 1 | AAV97521  | Human EGF-R target | 1518  | 13.4 | 0.8 | 18 | 1 | ABL94603 | Rat VRI antisense  |
| 1446  | 13.4 | 0.8 | 17 | 1 | AAV69694  | Human GDNF gene ex | 1519  | 13.4 | 0.8 | 18 | 1 | AAZ44128 | PCR primer #3 desi |
| c1447 | 13.4 | 0.8 | 17 | 1 | AAV17893  | Anti-CMV oligonuc  | c1520 | 13.4 | 0.8 | 18 | 1 | ABX03808 | DNA encoding secre |
| c1448 | 13.4 | 0.8 | 17 | 1 | AAA21066  | Integrin alpha 6 s | 1521  | 13.4 | 0.8 | 18 | 1 | AAZ52481 | Lolium perenne lpp |
| c1449 | 13.4 | 0.8 | 17 | 1 | AAA23257  | Integrin subunit b | 1522  | 13.4 | 0.8 | 18 | 1 | ABV77210 | PCR primer used to |
| 1450  | 13.4 | 0.8 | 17 | 1 | AAA20471  | Integrin alpha 6 s | 1523  | 13.4 | 0.8 | 19 | 1 | AAQ31135 | Alpha 6A integrin  |
| 1451  | 13.4 | 0.8 | 17 | 1 | AAA24802  | Oestrogen receptor | 1524  | 13.4 | 0.8 | 19 | 1 | AAV30804 | Human proinhibin g |
| 1452  | 13.4 | 0.8 | 17 | 1 | AAF06373  | Hammerhead ribozym | 1525  | 13.4 | 0.8 | 19 | 1 | AAV31877 | S. aureus polypept |
| c1453 | 13.4 | 0.8 | 17 | 1 | ABK03332  | Human CD20 Inozyme | 1526  | 13.4 | 0.8 | 19 | 1 | AAZ20455 | PCR primer BmagsRe |
| c1454 | 13.4 | 0.8 | 17 | 1 | ABK03331  | Human cell cycle c | 1527  | 13.4 | 0.8 | 19 | 1 | AAV59837 | PCR primer used to |
| c1455 | 13.4 | 0.8 | 17 | 1 | AAZ03853  | Human otoferlin ex | 1528  | 13.4 | 0.8 | 19 | 1 | AAA83293 | cdk8 ribozyme bind |
| c1456 | 13.4 | 0.8 | 17 | 1 | AAV95074  | Human GMPLP-1 17-m | c1529 | 13.4 | 0.8 | 19 | 1 | AAH31519 | Targeted chromosom |
| c1457 | 13.4 | 0.8 | 17 | 1 | ABN08906  | Human GMPLP-1 17-m | c1530 | 13.4 | 0.8 | 19 | 1 | AAH37489 | SNP specific upper |
| c1458 | 13.4 | 0.8 | 17 | 1 | ABN00075  | Human GMPLP-1 17-m | 1531  | 13.4 | 0.8 | 19 | 1 | AAH58455 | Cell-cycle depende |
| c1459 | 13.4 | 0.8 | 17 | 1 | ABN00074  | Human GMPLP-1 17-m | c1532 | 13.4 | 0.8 | 19 | 1 | ABK24631 | Hygromycin-B codin |
| c1460 | 13.4 | 0.8 | 17 | 1 | ABN08905  | Human GMPLP-1 17-m | c1533 | 13.4 | 0.8 | 19 | 1 | AAV50058 | Murine alphabeta T |
| c1461 | 13.4 | 0.8 | 17 | 1 | ABN00076  | Human GMPLP-1 17-m | c1534 | 13.4 | 0.8 | 19 | 1 | ABQ76903 | hdm2 protein-assoc |
| c1462 | 13.4 | 0.8 | 17 | 1 | ABN08904  | Human GMPLP-1 17-m | c1535 | 13.4 | 0.8 | 19 | 1 | ABG64429 | Human NOVX forward |
| c1463 | 13.4 | 0.8 | 17 | 1 | ABQ63456  | Human KROMia porti | c1536 | 13.4 | 0.8 | 19 | 1 | ADC39346 | Novel human NOVX g |
| c1464 | 13.4 | 0.8 | 17 | 1 | ABQ63457  | Human KROMia porti | c1537 | 13.4 | 0.8 | 19 | 1 | ADE29716 | Mitogen activated  |
| c1465 | 13.4 | 0.8 | 17 | 1 | ABV78816  | Human HTPL scannin | 1538  | 13.4 | 0.8 | 19 | 1 | ADE29821 | Mitogen activated  |
| c1466 | 13.4 | 0.8 | 17 | 1 | ABV78819  | Human HTPL scannin | 1539  | 13.4 | 0.8 | 20 | 1 | AAV61769 | Human PCTAIRS prot |
| 1467  | 13.4 | 0.8 | 17 | 1 | ABK19255  | Human ERG Amberyze | 1540  | 13.4 | 0.8 | 20 | 1 | AAQ15414 | Probe to mutant se |
| 1468  | 13.4 | 0.8 | 17 | 1 | ABV75020  | Human PAPP-Ea asso | 1541  | 13.4 | 0.8 | 20 | 1 | AAQ15283 | Probe to wild-type |
| 1469  | 13.4 | 0.8 | 17 | 1 | ABV90264  | Human POSHL1 scann | 1542  | 13.4 | 0.8 | 20 | 1 | AAQ15416 | Probe to mutant se |
| c1470 | 13.4 | 0.8 | 17 | 1 | ABV91092  | Human POSHL1 scann | 1543  | 13.4 | 0.8 | 20 | 1 | AAQ56208 | Glucocerebrosidase |
| c1471 | 13.4 | 0.8 | 17 | 1 | ABV91093  | Human POSHL1 scann | c1544 | 13.4 | 0.8 | 20 | 1 | AAV01136 | 2-RAP protooncogen |
| 1472  | 13.4 | 0.8 | 17 | 1 | ABV90265  | Human POSHL1 scann | c1545 | 13.4 | 0.8 | 20 | 1 | AAV01150 | Homeobox 7 PCR pri |
| 1473  | 13.4 | 0.8 | 17 | 1 | ABV90266  | Human POSHL1 scann | c1546 | 13.4 | 0.8 | 20 | 1 | AAV01194 | T-cell receptor be |
| c1474 | 13.4 | 0.8 | 17 | 1 | ABV91091  | Human POSHL1 scann | c1547 | 13.4 | 0.8 | 20 | 1 | AAV01194 | PCR primer 4 used  |
| c1475 | 13.4 | 0.8 | 17 | 1 | AAV18424  | Degenerate PCR pri | 1548  | 13.4 | 0.8 | 20 | 1 | AAT97944 | Locl-specific prim |
| 1476  | 13.4 | 0.8 | 17 | 1 | ABK57291  | Human CICAL gene e | c1549 | 13.4 | 0.8 | 20 | 1 | AAT68376 | Locl-specific prim |
| 1477  | 13.4 | 0.8 | 17 | 1 | ABK56866  | Human CICAL gene e | 1550  | 13.4 | 0.8 | 20 | 1 | AAT68375 | Human biallelic po |
| 1478  | 13.4 | 0.8 | 17 | 1 | ABK56439  | Human CICAL gene e | c1551 | 13.4 | 0.8 | 20 | 1 | AAV68376 | Primer YAG. Synth  |
| 1479  | 13.4 | 0.8 | 17 | 1 | ABK57129  | Human CICAL gene e | c1552 | 13.4 | 0.8 | 20 | 1 | AAV27081 | Primer YSS. Synth  |
| 1480  | 13.4 | 0.8 | 17 | 1 | ABK57182  | Human CICAL gene e | 1553  | 13.4 | 0.8 | 20 | 1 | AAV42487 | PCR primer 2 used  |
| 1481  | 13.4 | 0.8 | 17 | 1 | ABK55967  | Human CICAL gene e | c1554 | 13.4 | 0.8 | 20 | 1 | AAV42487 | PCR primer 1 used  |
| 1482  | 13.4 | 0.8 | 17 | 1 | ACC54018  | Human tumour suppr | 1555  | 13.4 | 0.8 | 20 | 1 | AAV05848 | 3' primer for huma |
| c1483 | 13.4 | 0.8 | 17 | 1 | ACC53039  | Human tumour suppr | 1556  | 13.4 | 0.8 | 20 | 1 | AAV08608 | Primer ACE/184FB f |
| c1484 | 13.4 | 0.8 | 17 | 1 | ABT35689  | Tumour suppression | 1557  | 13.4 | 0.8 | 20 | 1 | AAZ31321 | CXCR4 gene inhibit |
| c1485 | 13.4 | 0.8 | 17 | 1 | ACA06589  | NFKB sub-unit modu | 1558  | 13.4 | 0.8 | 20 | 1 | AAZ05007 | PCR primer used to |
| c1486 | 13.4 | 0.8 | 17 | 1 | ACA07774  | NFKB sub-unit modu | 1559  | 13.4 | 0.8 | 20 | 1 | AAZ05006 | Rat high/low molec |
| 1487  | 13.4 | 0.8 | 17 | 1 | ACA08921  | NFKB sub-unit modu | 1560  | 13.4 | 0.8 | 20 | 1 | AAZ23146 | Rat T kinogen PC   |
| c1488 | 13.4 | 0.8 | 17 | 1 | ABZ65140  | Human HER2 DNazyme | 1561  | 13.4 | 0.8 | 20 | 1 | AAZ23149 | Deletion sequence  |
| c1489 | 13.4 | 0.8 | 17 | 1 | ABZ61477  | Human H-Ras DNazym | c1562 | 13.4 | 0.8 | 20 | 1 | AAZ33551 | PCR primer used to |
| c1490 | 13.4 | 0.8 | 17 | 1 | ABZ62006  | Human H-Ras DNazym | 1563  | 13.4 | 0.8 | 20 | 1 | AAZ93254 | PCR primer used to |
| 1491  | 13.4 | 0.8 | 17 | 1 | ABZ64791  | Human HER2 DNazyme | c1564 | 13.4 | 0.8 | 20 | 1 | AAZ96164 | PCR primer used to |
| c1492 | 13.4 | 0.8 | 17 | 1 | ABZ62005  | Human H-Ras DNazym | 1565  | 13.4 | 0.8 | 20 | 1 | AAZ40720 | Mouse multidrug re |
| 1493  | 13.4 | 0.8 | 17 | 1 | ACD64604  | HCV minus strand D | c1566 | 13.4 | 0.8 | 20 | 1 | AAZ72882 | Human biallelic ma |

|       |      |     |    |   |           |                     |       |      |     |    |   |           |                     |
|-------|------|-----|----|---|-----------|---------------------|-------|------|-----|----|---|-----------|---------------------|
| c1567 | 13.4 | 0.8 | 20 | 1 | AAA79748  | Hepatitis B virus   | c1640 | 13.2 | 0.8 | 18 | 1 | AA117896  | Anti-CMV oligonucle |
| 1568  | 13.4 | 0.8 | 20 | 1 | AA38236   | Human angiotensin-  | c1641 | 13.2 | 0.8 | 18 | 1 | AAZ08650  | D52-like transcript |
| 1569  | 13.4 | 0.8 | 20 | 1 | AA62236   | Human ACE, AGI and  | c1642 | 13.2 | 0.8 | 18 | 1 | AAZ18148  | STK 13 gene specif  |
| c1570 | 13.4 | 0.8 | 20 | 1 | AAA9391   | Rat GFGR coding se  | c1643 | 13.2 | 0.8 | 18 | 1 | AAZ18144  | STK 11 gene specif  |
| 1571  | 13.4 | 0.8 | 20 | 1 | AAA66189  | Dog genomic marker  | c1644 | 13.2 | 0.8 | 18 | 1 | AAZ18150  | STK 10 gene specif  |
| c1572 | 13.4 | 0.8 | 20 | 1 | AAA66813  | Dog genomic marker  | c1645 | 13.2 | 0.8 | 18 | 1 | AAZ18142  | STK 14 gene specif  |
| c1573 | 13.4 | 0.8 | 20 | 1 | AA679540  | Murine p38beta ant  | c1646 | 13.2 | 0.8 | 18 | 1 | AAZ18138  | STK 8 gene specif   |
| 1574  | 13.4 | 0.8 | 20 | 1 | AAF55056  | PCR primer used to  | c1647 | 13.2 | 0.8 | 18 | 1 | AAZ18146  | STK 12 gene specif  |
| c1575 | 13.4 | 0.8 | 20 | 1 | AAH75317  | Mouse inducible NO  | c1648 | 13.2 | 0.8 | 18 | 1 | AAZ18140  | STK 9 gene specif   |
| c1576 | 13.4 | 0.8 | 20 | 1 | AAH92776  | Human hRNP A1 pho   | c1649 | 13.2 | 0.8 | 18 | 1 | AAZ22359  | Phosphorothioate a  |
| c1577 | 13.4 | 0.8 | 20 | 1 | AAAC92806 | Human hRNP A1 pho   | c1650 | 13.2 | 0.8 | 18 | 1 | AAZ27839  | CRCA-1 coding sequ  |
| 1578  | 13.4 | 0.8 | 20 | 1 | AA62218   | PCR primer for fac  | c1651 | 13.2 | 0.8 | 18 | 1 | AAZ04875  | Tenascin-C phospho  |
| c1579 | 13.4 | 0.8 | 20 | 1 | AAAD0441  | Forward PCR primer  | c1652 | 13.2 | 0.8 | 18 | 1 | AAZ44153  | Human EGR-1 DNA an  |
| c1580 | 13.4 | 0.8 | 20 | 1 | AAH00813  | Cryptosporidium pa  | c1653 | 13.2 | 0.8 | 18 | 1 | AAAS5598  | TRAF3 antisense ol  |
| c1581 | 13.4 | 0.8 | 20 | 1 | AAH22573  | PK-2 transgene det  | c1654 | 13.2 | 0.8 | 18 | 1 | AAZ48544  | Human TNFR1 mRNA i  |
| c1582 | 13.4 | 0.8 | 20 | 1 | AAH24592  | Human endometrium   | c1655 | 13.2 | 0.8 | 18 | 1 | AAAO9398  | Coding sequence CO  |
| c1583 | 13.4 | 0.8 | 20 | 1 | AAAD11810 | Salmonella typhimu  | c1656 | 13.2 | 0.8 | 18 | 1 | AAAO9397  | Back primer #4 use  |
| 1584  | 13.4 | 0.8 | 20 | 1 | AAAC82279 | PCR primer used sp  | c1657 | 13.2 | 0.8 | 18 | 1 | AAAS3651  | Human OP-1 mutagen  |
| c1585 | 13.4 | 0.8 | 20 | 1 | AAH48612  | Human fascin assoc  | c1658 | 13.2 | 0.8 | 18 | 1 | AAAS3650  | Human OP-1 mutagen  |
| c1586 | 13.4 | 0.8 | 20 | 1 | AAAC86079 | Primer to detect C  | c1659 | 13.2 | 0.8 | 18 | 1 | AAAO9722  | G-alpha-12 antisen  |
| c1587 | 13.4 | 0.8 | 20 | 1 | AAAC86072 | Primer to detect T  | c1660 | 13.2 | 0.8 | 18 | 1 | AAAS86694 | Cdc 2 kinase hamme  |
| c1588 | 13.4 | 0.8 | 20 | 1 | AAAC89125 | Canine retroviral   | c1661 | 13.2 | 0.8 | 18 | 1 | AAAS86597 | Cdc 2 kinase hamme  |
| 1589  | 13.4 | 0.8 | 20 | 1 | AAF91350  | Human E2F transcri  | c1662 | 13.2 | 0.8 | 18 | 1 | AAAS2354  | ErbB-2 oncogene B2  |
| c1590 | 13.4 | 0.8 | 20 | 1 | AAH03059  | Microorganism dete  | c1663 | 13.2 | 0.8 | 18 | 1 | AAZ77136  | Human biallelic ma  |
| 1591  | 13.4 | 0.8 | 20 | 1 | AAH26635  | Human MADH6 mRNA a  | c1664 | 13.2 | 0.8 | 18 | 1 | AAZ77289  | Human biallelic ma  |
| c1592 | 13.4 | 0.8 | 20 | 1 | AAH26636  | Human MADH6 mRNA a  | c1665 | 13.2 | 0.8 | 18 | 1 | AAZ57608  | PCR primer #1 for   |
| c1593 | 13.4 | 0.8 | 20 | 1 | AAH42529  | PCR primer used to  | c1666 | 13.2 | 0.8 | 18 | 1 | AAZ37329  | Human c-kit fragme  |
| 1594  | 13.4 | 0.8 | 20 | 1 | AAAD41542 | Cystatin M gene sp  | c1667 | 13.2 | 0.8 | 18 | 1 | AAAZ29894 | BMP mutant chimexi  |
| c1595 | 13.4 | 0.8 | 20 | 1 | AAAD41116 | Primer ON-Din1-F3   | c1668 | 13.2 | 0.8 | 18 | 1 | AAAZ29895 | BMP mutant chimexi  |
| c1596 | 13.4 | 0.8 | 20 | 1 | AAH89213  | Human Talin antise  | c1669 | 13.2 | 0.8 | 18 | 1 | AAZ35818  | D53 gene PCR prime  |
| 1597  | 13.4 | 0.8 | 20 | 1 | AAAL40334 | Human caspase 6 an  | c1670 | 13.2 | 0.8 | 18 | 1 | AAZ99782  | Nucleotide sequenc  |
| c1598 | 13.4 | 0.8 | 20 | 1 | AAAD40926 | Human HPA1 antisen  | c1671 | 13.2 | 0.8 | 18 | 1 | AACT1846  | Single nucleotide   |
| 1599  | 13.4 | 0.8 | 20 | 1 | AAZ33413  | Candida albicans G  | c1672 | 13.2 | 0.8 | 18 | 1 | AACT1849  | Single nucleotide   |
| c1600 | 13.4 | 0.8 | 20 | 1 | AAAL48224 | Human IL-10 coding  | c1673 | 13.2 | 0.8 | 18 | 1 | AAAS8699  | Nucleotide sequenc  |
| c1601 | 13.4 | 0.8 | 20 | 1 | AAI97181  | Capture oligonucle  | c1674 | 13.2 | 0.8 | 18 | 1 | AAH49336  | C. glutamicum ATCC  |
| c1602 | 13.4 | 0.8 | 20 | 1 | ABX49768  | Human atopic derma  | c1675 | 13.2 | 0.8 | 18 | 1 | AAAD06112 | Human ErbB-2 (E2C)  |
| 1603  | 13.4 | 0.8 | 20 | 1 | ABK69328  | Chimeric phosphoro  | c1676 | 13.2 | 0.8 | 18 | 1 | AAH75784  | Human NOV 12 rever  |
| c1604 | 13.4 | 0.8 | 20 | 1 | ABT03951  | Human pol kappa 76  | c1677 | 13.2 | 0.8 | 18 | 1 | AAH40975  | PCR primer used fo  |
| c1605 | 13.4 | 0.8 | 20 | 1 | AAAD41680 | Human IL-12 p35 su  | c1678 | 13.2 | 0.8 | 18 | 1 | AAAF5699  | Multiple repeated   |
| c1606 | 13.4 | 0.8 | 20 | 1 | AAZ92752  | Human oligonucleot  | c1679 | 13.2 | 0.8 | 18 | 1 | AAAF5699  | Pseudomonas aerugi  |
| 1607  | 13.4 | 0.8 | 20 | 1 | ABZ87042  | Human oligonucleot  | c1680 | 13.2 | 0.8 | 18 | 1 | AAH61860  | Cdc 2 kinase hamme  |
| c1608 | 13.4 | 0.8 | 20 | 1 | ABZ86781  | Human oligonucleot  | c1681 | 13.2 | 0.8 | 18 | 1 | AAH61763  | Cdc 2 kinase hamme  |
| 1609  | 13.4 | 0.8 | 20 | 1 | ABZ90932  | Human oligonucleot  | c1682 | 13.2 | 0.8 | 18 | 1 | ABAS2274  | Zmax1 gene region   |
| c1610 | 13.4 | 0.8 | 20 | 1 | ABZ92011  | Human oligonucleot  | c1683 | 13.2 | 0.8 | 18 | 1 | AAAS16908 | Beta-defensin PCR   |
| 1611  | 13.4 | 0.8 | 20 | 1 | ABZ75745  | Sorting nexin 3 ge  | c1684 | 13.2 | 0.8 | 18 | 1 | ABL43130  | Human chromosome 1  |
| c1612 | 13.4 | 0.8 | 20 | 1 | ADA26843  | Human nuclear rece  | c1685 | 13.2 | 0.8 | 18 | 1 | ABL43199  | Human chromosome 1  |
| 1613  | 13.4 | 0.8 | 20 | 1 | ACA97213  | Vpr-driven constru  | c1686 | 13.2 | 0.8 | 18 | 1 | ABT05040  | TNFR1 expression m  |
| c1614 | 13.4 | 0.8 | 20 | 1 | ABT34199  | Mouse short hetero  | c1687 | 13.2 | 0.8 | 18 | 1 | AAI72473  | E2C recognition se  |
| c1615 | 13.4 | 0.8 | 20 | 1 | ABX78139  | Murine p38-alpha M  | c1688 | 13.2 | 0.8 | 18 | 1 | ABS97682  | Histamine N-methyl  |
| 1616  | 13.4 | 0.8 | 20 | 1 | ABT43349  | Neuroblastoma-rela  | c1689 | 13.2 | 0.8 | 18 | 1 | ABQ76943  | Murine alpha-T cel  |
| c1617 | 13.4 | 0.8 | 20 | 1 | ABX95014  | Human MAGE-C2 gene  | c1690 | 13.2 | 0.8 | 18 | 1 | ABK23071  | Human Zmax1 cDNA f  |
| 1618  | 13.4 | 0.8 | 20 | 1 | AD52514   | Arabidopsis thalia  | c1691 | 13.2 | 0.8 | 18 | 1 | AAD38484  | Bovine leukocyte a  |
| c1619 | 13.4 | 0.8 | 20 | 1 | AD52516   | Neuroblastoma-rela  | c1692 | 13.2 | 0.8 | 18 | 1 | AAF98701  | S. mutans 16S rRNA  |
| 1620  | 13.4 | 0.8 | 20 | 1 | ACD23029  | Human NEMO gene in  | c1693 | 13.2 | 0.8 | 18 | 1 | AAD38935  | Human Her-2 antise  |
| c1621 | 13.4 | 0.8 | 20 | 1 | ACC99704  | Cyclin D1 PCR prim  | c1694 | 13.2 | 0.8 | 18 | 1 | ABX34391  | PCR primer #2 for   |
| c1622 | 13.4 | 0.8 | 20 | 1 | AD47483   | Microorganism seque | c1695 | 13.2 | 0.8 | 18 | 1 | ACF34402  | Oligonucleotide ta  |
| 1623  | 13.4 | 0.8 | 20 | 1 | ACD13554  | Human bi-direction  | c1696 | 13.2 | 0.8 | 18 | 1 | ACF34407  | UP5 universal 5' p  |
| c1624 | 13.4 | 0.8 | 20 | 1 | ADA97855  | Human tumour necro  | c1697 | 13.2 | 0.8 | 18 | 1 | ACA06065  | Antisense inhibiti  |
| c1625 | 13.4 | 0.8 | 20 | 1 | ADU90005  | Antisense oligonu   | c1698 | 13.2 | 0.8 | 18 | 1 | ACA02217  | Proto-oncogene c-e  |
| 1626  | 13.4 | 0.8 | 20 | 1 | ADQ73020  | O-glycan alpha2,8-  | c1699 | 13.2 | 0.8 | 18 | 1 | ACC45654  | Human HSM Srs mark  |
| c1627 | 13.2 | 0.8 | 18 | 1 | AAQ26202  | HLA-DR beta subty   | c1700 | 13.2 | 0.8 | 18 | 1 | ABX04788  | Guanylate kinase g  |
| c1628 | 13.2 | 0.8 | 18 | 1 | AAQ30876  | Oligonucleotide co  | c1701 | 13.2 | 0.8 | 18 | 1 | ADB98352  | Sequence tagged si  |
| c1629 | 13.2 | 0.8 | 18 | 1 | AAQ52831  | Cytomegalovirus ta  | c1702 | 13.2 | 0.8 | 19 | 1 | AAZ48738  | Human alpha1-antic  |
| c1630 | 13.2 | 0.8 | 18 | 1 | AAQ77635  | Ribonucleotide to   | c1703 | 13.2 | 0.8 | 19 | 1 | AAQ06520  | Probe/primer TB-9   |
| 1631  | 13.2 | 0.8 | 18 | 1 | AAQ77649  | Antisense ribonuc   | c1704 | 13.2 | 0.8 | 19 | 1 | AAQ83729  | Primer D5, to gene  |
| c1632 | 13.2 | 0.8 | 18 | 1 | AAQ766394 | Polynucleotide to   | c1705 | 13.2 | 0.8 | 19 | 1 | AAQ82064  | Chromosome 11 (loc  |
| 1633  | 13.2 | 0.8 | 18 | 1 | AAQ776621 | Antisense polynucl  | c1706 | 13.2 | 0.8 | 19 | 1 | AAAT47458 | Foldback triplex f  |
| c1634 | 13.2 | 0.8 | 18 | 1 | AAAT11979 | CMV antisense olig  | c1707 | 13.2 | 0.8 | 19 | 1 | AAV53063  | Cytochrome c oxida  |
| c1635 | 13.2 | 0.8 | 18 | 1 | AAAT01680 | Peptide nucleic ac  | c1708 | 13.2 | 0.8 | 19 | 1 | AAV41350  | M. catarrhalis str  |
| c1636 | 13.2 | 0.8 | 18 | 1 | AAAT91702 | Human p53 oncogene  | c1709 | 13.2 | 0.8 | 19 | 1 | AAAX56025 | Wild-type E-cadher  |
| c1637 | 13.2 | 0.8 | 18 | 1 | AAAX70292 | Human fit1 VEGF re  | c1710 | 13.2 | 0.8 | 19 | 1 | AAZ20383  | PCR primer for bac  |
| c1638 | 13.2 | 0.8 | 18 | 1 | AAAT58789 | Primer (set B) for  | c1711 | 13.2 | 0.8 | 19 | 1 | AAAX84403 | PCR primer for S.   |
| 1639  | 13.2 | 0.8 | 18 | 1 | AAV333077 | cdc2 kinase primer  | c1712 | 13.2 | 0.8 | 19 | 1 | AAAX18419 | PCR primer bE5(+)   |

|      |      |     |    |   |          |                    |      |      |     |    |   |          |                    |
|------|------|-----|----|---|----------|--------------------|------|------|-----|----|---|----------|--------------------|
| 1713 | 13.2 | 0.8 | 19 | 1 | AA18421  | PCR primer bE5 (+) | 1786 | 13.2 | 0.8 | 20 | 1 | AA103255 | Erwinia thapontici |
| 1714 | 13.2 | 0.8 | 19 | 1 | AA229215 | Primer IFN6 used f | 1787 | 13.2 | 0.8 | 20 | 1 | AA086564 | HSV antisense olig |
| 1715 | 13.2 | 0.8 | 19 | 1 | AA044957 | Tenascin-C phospho | 1788 | 13.2 | 0.8 | 20 | 1 | AA082120 | Chromosome 11 (loc |
| 1716 | 13.2 | 0.8 | 19 | 1 | AA044958 | Tenascin-C phospho | 1789 | 13.2 | 0.8 | 20 | 1 | AA041351 | Human gene signatu |
| 1717 | 13.2 | 0.8 | 19 | 1 | AA257250 | Human mitochondria | 1790 | 13.2 | 0.8 | 20 | 1 | AA041156 | Human gene signatu |
| 1718 | 13.2 | 0.8 | 19 | 1 | AA257251 | Human mitochondria | 1791 | 13.2 | 0.8 | 20 | 1 | AAQ56065 | Primer for subclon |
| 1719 | 13.2 | 0.8 | 19 | 1 | AA083633 | cdk-we-hu ribozyme | 1792 | 13.2 | 0.8 | 20 | 1 | AAQ01837 | N-ras mutant Aspl2 |
| 1720 | 13.2 | 0.8 | 19 | 1 | AA082982 | cdk6 ribozyme bind | 1793 | 13.2 | 0.8 | 20 | 1 | AAQ87113 | Aspergillus niger  |
| 1721 | 13.2 | 0.8 | 19 | 1 | AA083091 | cdk7 ribozyme bind | 1794 | 13.2 | 0.8 | 20 | 1 | AAQ84204 | PKC-eta antisense  |
| 1722 | 13.2 | 0.8 | 19 | 1 | AA084344 | Cyclin D2 ribozyme | 1795 | 13.2 | 0.8 | 20 | 1 | AA087113 | SMN gene T-BD541   |
| 1723 | 13.2 | 0.8 | 19 | 1 | AA082641 | cdk2 ribozyme bind | 1796 | 13.2 | 0.8 | 20 | 1 | AA018864 | Hypermutable targe |
| 1724 | 13.2 | 0.8 | 19 | 1 | AA082642 | cdk2 ribozyme bind | 1797 | 13.2 | 0.8 | 20 | 1 | AA015116 | Hypermutable targe |
| 1725 | 13.2 | 0.8 | 19 | 1 | AA086304 | PCSA HH ribozyme b | 1798 | 13.2 | 0.8 | 20 | 1 | AA015116 | Human Factor V gen |
| 1726 | 13.2 | 0.8 | 19 | 1 | AA086304 | cdk-we-hu ribozyme | 1799 | 13.2 | 0.8 | 20 | 1 | AA015116 | Human Factor V gen |
| 1727 | 13.2 | 0.8 | 19 | 1 | AA083198 | cdk7 ribozyme bind | 1799 | 13.2 | 0.8 | 20 | 1 | AA015116 | Human Factor V gen |
| 1728 | 13.2 | 0.8 | 19 | 1 | AA084464 | Cyclin D3 ribozyme | 1800 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1729 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1801 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1730 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1802 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1731 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1803 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1732 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1804 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1733 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1805 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1734 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1806 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1735 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1807 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1736 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1808 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1737 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1809 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1738 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1810 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1739 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1811 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1740 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1812 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1741 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1813 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1742 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1814 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1743 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1815 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1744 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1816 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1745 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1817 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1746 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1818 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1747 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1819 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1748 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1820 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1749 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1821 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1750 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1822 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1751 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1823 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1752 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1824 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1753 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1825 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1754 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1826 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1755 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1827 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1756 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1828 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1757 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1829 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1758 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1830 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1759 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1831 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1760 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1832 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1761 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1833 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1762 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1834 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1763 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1835 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1764 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1836 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1765 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1837 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1766 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1838 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1767 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1839 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1768 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1840 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1769 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1841 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1770 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1842 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1771 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1843 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1772 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1844 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1773 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1845 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1774 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1846 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1775 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1847 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1776 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1848 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1777 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1849 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1778 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1850 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1779 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1851 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1780 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1852 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1781 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1853 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1782 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1854 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1783 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1855 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1784 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1856 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1785 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1857 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |
| 1786 | 13.2 | 0.8 | 19 | 1 | AA082980 | cdk6 ribozyme bind | 1858 | 13.2 | 0.8 | 20 | 1 | AA033103 | Antisense oligonuc |

|      |      |     |    |   |          |                       |      |      |     |    |   |          |                      |
|------|------|-----|----|---|----------|-----------------------|------|------|-----|----|---|----------|----------------------|
| 1859 | 13.2 | 0.8 | 20 | 1 | AAA27774 | 3' Mutagenic prime    | 1932 | 13.2 | 0.8 | 20 | 1 | ABL90897 | Human protein kinase |
| 1860 | 13.2 | 0.8 | 20 | 1 | AA000195 | PCR primer to crea    | 1933 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human calreticulin   |
| 1861 | 13.2 | 0.8 | 20 | 1 | AA271480 | Human biallelic wa    | 1934 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human chromosome 1   |
| 1862 | 13.2 | 0.8 | 20 | 1 | AA274216 | Human biallelic wa    | 1935 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human chromosome 1   |
| 1863 | 13.2 | 0.8 | 20 | 1 | AA235086 | Herpesvirus entry     | 1936 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human chromosome 1   |
| 1864 | 13.2 | 0.8 | 20 | 1 | AA239022 | HER22 3' primer       | 1937 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human chromosome 1   |
| 1865 | 13.2 | 0.8 | 20 | 1 | AA239022 | Murine IL-5 antisense | 1938 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human TSP1 domain    |
| 1866 | 13.2 | 0.8 | 20 | 1 | AA239022 | B. thuringiensis p    | 1939 | 13.2 | 0.8 | 20 | 1 | AB235112 | EXY15 (+) upstream   |
| 1867 | 13.2 | 0.8 | 20 | 1 | AA239022 | B. thuringiensis p    | 1940 | 13.2 | 0.8 | 20 | 1 | AB235112 | Mycobacterium-spec   |
| 1868 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human MAPK kinase     | 1941 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human damage spec    |
| 1869 | 13.2 | 0.8 | 20 | 1 | AA239022 | Sequencing primer     | 1942 | 13.2 | 0.8 | 20 | 1 | AB235112 | M3 Muscarinic rece   |
| 1870 | 13.2 | 0.8 | 20 | 1 | AA239022 | Murine factor V PC    | 1943 | 13.2 | 0.8 | 20 | 1 | AB235112 | HCV AB008441 fragm   |
| 1871 | 13.2 | 0.8 | 20 | 1 | AA239022 | Single nucleotide     | 1944 | 13.2 | 0.8 | 20 | 1 | AB235112 | Candida albicans G   |
| 1872 | 13.2 | 0.8 | 20 | 1 | AA239022 | Single nucleotide     | 1945 | 13.2 | 0.8 | 20 | 1 | AB235112 | Candida albicans G   |
| 1873 | 13.2 | 0.8 | 20 | 1 | AA239022 | Single nucleotide     | 1946 | 13.2 | 0.8 | 20 | 1 | AB235112 | Candida albicans G   |
| 1874 | 13.2 | 0.8 | 20 | 1 | AA239022 | Single nucleotide     | 1947 | 13.2 | 0.8 | 20 | 1 | AB235112 | Barley microsatell   |
| 1875 | 13.2 | 0.8 | 20 | 1 | AA239022 | Single nucleotide     | 1948 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human BSMR gene po   |
| 1876 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human hlx3 exon lb    | 1949 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human inhibitor of   |
| 1877 | 13.2 | 0.8 | 20 | 1 | AA239022 | Intronic primer (3    | 1950 | 13.2 | 0.8 | 20 | 1 | AB235112 | ECRP gene related    |
| 1878 | 13.2 | 0.8 | 20 | 1 | AA239022 | PCR primer used fo    | 1951 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human APOA1 methyl   |
| 1879 | 13.2 | 0.8 | 20 | 1 | AA239022 | ASTH1 polymorphic     | 1952 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human cancer promo   |
| 1880 | 13.2 | 0.8 | 20 | 1 | AA239022 | Cell cycle regulat    | 1953 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human CS193 EST-sp   |
| 1881 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human B7-1 mRNA an    | 1954 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human E2F transcri   |
| 1882 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human alpha(1) co     | 1955 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human IL-1beta PCR   |
| 1883 | 13.2 | 0.8 | 20 | 1 | AA239022 | Trehalase consensus   | 1956 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human MVR SLC4A3 C   |
| 1884 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human E2F transcri    | 1957 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human MVR SLC4A3 G   |
| 1885 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human dact inhibi     | 1958 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human PGA loci amp   |
| 1886 | 13.2 | 0.8 | 20 | 1 | AA239022 | 5' RT-PCR primer f    | 1959 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human DSS2432 loci   |
| 1887 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human PARP-3 antis    | 1960 | 13.2 | 0.8 | 20 | 1 | AB235112 | Capture oligonucleo  |
| 1888 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human oestrogen re    | 1961 | 13.2 | 0.8 | 20 | 1 | AB235112 | Capture oligonucleo  |
| 1889 | 13.2 | 0.8 | 20 | 1 | AA239022 | 3' primer for DNAs    | 1962 | 13.2 | 0.8 | 20 | 1 | AB235112 | Capture oligonucleo  |
| 1890 | 13.2 | 0.8 | 20 | 1 | AA239022 | PCR primer #49.. H    | 1963 | 13.2 | 0.8 | 20 | 1 | AB235112 | Capture oligonucleo  |
| 1891 | 13.2 | 0.8 | 20 | 1 | AA239022 | BMV 35kDa protein     | 1964 | 13.2 | 0.8 | 20 | 1 | AB235112 | Capture oligonucleo  |
| 1892 | 13.2 | 0.8 | 20 | 1 | AA239022 | PCR primer used to    | 1965 | 13.2 | 0.8 | 20 | 1 | AB235112 | Bovine epithelial    |
| 1893 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human nucleolin ph    | 1966 | 13.2 | 0.8 | 20 | 1 | AB235112 | Mouse casein kinase  |
| 1894 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human caspase 3 an    | 1967 | 13.2 | 0.8 | 20 | 1 | AB235112 | PCR primer for pro   |
| 1895 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human caspase 3 an    | 1968 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human insulin LC R   |
| 1896 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human caspase 3 an    | 1969 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human GTP-Rho bind   |
| 1897 | 13.2 | 0.8 | 20 | 1 | AA239022 | PCR primer used to    | 1970 | 13.2 | 0.8 | 20 | 1 | AB235112 | Apo B454 DNA ampl    |
| 1898 | 13.2 | 0.8 | 20 | 1 | AA239022 | Shrimp white spot     | 1971 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1899 | 13.2 | 0.8 | 20 | 1 | AA239022 | Probe sequence use    | 1972 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oestoxin olig  |
| 1900 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human catenin-bind    | 1973 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human tryptase b o   |
| 1901 | 13.2 | 0.8 | 20 | 1 | AA239022 | Primer for amplif     | 1974 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1902 | 13.2 | 0.8 | 20 | 1 | AA239022 | Oligonucleotide fo    | 1975 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1903 | 13.2 | 0.8 | 20 | 1 | AA239022 | Oligonucleotide fo    | 1976 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1904 | 13.2 | 0.8 | 20 | 1 | AA239022 | Enhanced green flu    | 1977 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1905 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human E2F transcri    | 1978 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1906 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human alpha2/alpha    | 1979 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1907 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human HLA Class I     | 1980 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1908 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human carbonyl red    | 1981 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1909 | 13.2 | 0.8 | 20 | 1 | AA239022 | Synthetic antisens    | 1982 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1910 | 13.2 | 0.8 | 20 | 1 | AA239022 | Synthetic antisens    | 1983 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1911 | 13.2 | 0.8 | 20 | 1 | AA239022 | Reverse primer for    | 1984 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1912 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human D32432 locu     | 1985 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1913 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human FGA locus am    | 1986 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1914 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human gene methyl     | 1987 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1915 | 13.2 | 0.8 | 20 | 1 | AA239022 | Oligonucleotide #1    | 1988 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1916 | 13.2 | 0.8 | 20 | 1 | AA239022 | Panconi anaemia FA    | 1989 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1917 | 13.2 | 0.8 | 20 | 1 | AA239022 | Cytomegalovirus PR    | 1990 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1918 | 13.2 | 0.8 | 20 | 1 | AA239022 | Real-time PCR LC R    | 1991 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1919 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human API4 antisen    | 1992 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1920 | 13.2 | 0.8 | 20 | 1 | AA239022 | Murine SAC1 gene-s    | 1993 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1921 | 13.2 | 0.8 | 20 | 1 | AA239022 | Maturation/activat    | 1994 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1922 | 13.2 | 0.8 | 20 | 1 | AA239022 | Maturation/activat    | 1995 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1923 | 13.2 | 0.8 | 20 | 1 | AA239022 | Primer #1 for anal    | 1996 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human oligonucleot   |
| 1924 | 13.2 | 0.8 | 20 | 1 | AA239022 | Glyceroldehyde 6-p    | 1997 | 13.2 | 0.8 | 20 | 1 | AB235112 | Invader detection    |
| 1925 | 13.2 | 0.8 | 20 | 1 | AA239022 | Rat protein phosph    | 1998 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human IFNGR1 antis   |
| 1926 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human APOA1 PCR pr    | 1999 | 13.2 | 0.8 | 20 | 1 | AB235112 | Transforming grow    |
| 1927 | 13.2 | 0.8 | 20 | 1 | AA239022 | T. tauschii/wheat     | 2000 | 13.2 | 0.8 | 20 | 1 | AB235112 | PCR primer #1, us    |
| 1928 | 13.2 | 0.8 | 20 | 1 | AA239022 | Dog multidrug resi    | 2001 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human interleukin    |
| 1929 | 13.2 | 0.8 | 20 | 1 | AA239022 | C. glutamicum flva    | 2002 | 13.2 | 0.8 | 20 | 1 | AB235112 | DPPI0 PCR primer #   |
| 1930 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human FTR1B antisense | 2003 | 13.2 | 0.8 | 20 | 1 | AB235112 | Bovine DGAT PCR pr   |
| 1931 | 13.2 | 0.8 | 20 | 1 | AA239022 | Human uroplakin II    | 2004 | 13.2 | 0.8 | 20 | 1 | AB235112 | Human CS193 gene s   |

|       |      |     |    |   |           |                      |       |    |     |    |   |           |                    |
|-------|------|-----|----|---|-----------|----------------------|-------|----|-----|----|---|-----------|--------------------|
| c2005 | 13.2 | 0.8 | 20 | 1 | ACC42413  | Acyl CoA cholesterol | c2078 | 13 | 0.7 | 15 | 1 | AAA29401  | Acid/base ortholog |
| c2006 | 13.2 | 0.8 | 20 | 1 | ADA44761  | Antisense oligonuc   | c2079 | 13 | 0.7 | 15 | 1 | AAF50615  | IGF-1 oligonucleot |
| c2007 | 13.2 | 0.8 | 20 | 1 | ABV74820  | Human scavenger re   | c2080 | 13 | 0.7 | 15 | 1 | AAF50621  | IGF-1 oligonucleot |
| c2008 | 13.2 | 0.8 | 20 | 1 | AAD55888  | Human CN-1 gene am   | c2081 | 13 | 0.7 | 15 | 1 | AAS19610  | ASO probe #2 to de |
| c2009 | 13.2 | 0.8 | 20 | 1 | ABQ77182  | Human ABCG12 intro   | c2082 | 13 | 0.7 | 15 | 1 | AAD25201  | Human homeo box D3 |
| c2010 | 13.2 | 0.8 | 20 | 1 | ACC49693  | Human KSR chimeric   | c2083 | 13 | 0.7 | 15 | 1 | ABQ72266  | Human CYP2D6 allel |
| c2011 | 13.2 | 0.8 | 20 | 1 | ACC79479  | STI strain B relat   | c2084 | 13 | 0.7 | 15 | 1 | ABX54339  | Human SCVA26 gene  |
| c2012 | 13.2 | 0.8 | 20 | 1 | ACC79478  | Mouse Interleukin    | c2085 | 13 | 0.7 | 15 | 1 | ABX79342  | EST polymorphic DN |
| c2013 | 13.2 | 0.8 | 20 | 1 | ABX04308  | Mouse interleukin    | c2086 | 13 | 0.7 | 16 | 1 | AAAN60762 | Core sequence of m |
| c2014 | 13.2 | 0.8 | 20 | 1 | ABX17718  | Human urokinase pl   | c2087 | 13 | 0.7 | 16 | 1 | AAAN60764 | Core sequence of m |
| c2015 | 13.2 | 0.8 | 20 | 1 | ABX17777  | Mouse lrp kinase pl  | c2088 | 13 | 0.7 | 17 | 1 | AAAX74926 | Human KDR VEGF rec |
| c2016 | 13.2 | 0.8 | 20 | 1 | ACC46044  | Human LRP5 PCR pri   | c2089 | 13 | 0.7 | 17 | 1 | AAAX71552 | Human f1t-1 VEGF r |
| c2017 | 13.2 | 0.8 | 20 | 1 | ABT16308  | Zinc finger protei   | c2090 | 13 | 0.7 | 17 | 1 | AAAX74910 | Mouse f1t-1 VEGF r |
| c2018 | 13.2 | 0.8 | 20 | 1 | ADA20458  | Prostate tumour re   | c2091 | 13 | 0.7 | 17 | 1 | AAAX01062 | Mutant primer for  |
| c2019 | 13.2 | 0.8 | 20 | 1 | ADA84261  | Human APOAI PCR pr   | c2092 | 13 | 0.7 | 17 | 1 | AAAF01720 | Hammerhead ribozym |
| c2020 | 13.2 | 0.8 | 20 | 1 | AAD55134  | GAPDH-specific PCR   | c2093 | 13 | 0.7 | 17 | 1 | ABX03634  | Human CD20 DNazyme |
| c2021 | 13.2 | 0.8 | 20 | 1 | ABT43254  | Neuroblastoma-rela   | c2094 | 13 | 0.7 | 17 | 1 | ABX00010  | Human NOGO Hammet  |
| c2022 | 13.2 | 0.8 | 20 | 1 | ADB12752  | Human PRKR exon 10   | c2095 | 13 | 0.7 | 17 | 1 | AAH21294  | Human MDR-1 allele |
| c2023 | 13.2 | 0.8 | 20 | 1 | ACC71728  | VEGFR-2 antisense    | c2096 | 13 | 0.7 | 17 | 1 | AAH21293  | Human MDR-1 allele |
| c2024 | 13.2 | 0.8 | 20 | 1 | ABT14675  | Human cancer-testi   | c2097 | 13 | 0.7 | 17 | 1 | ABL46617  | Human GRID NCH rib |
| c2025 | 13.2 | 0.8 | 20 | 1 | AAD53849  | PCR primer #6 used   | c2098 | 13 | 0.7 | 17 | 1 | ABL46944  | Human GRID zinzyme |
| c2026 | 13.2 | 0.8 | 20 | 1 | ABZ59534  | Mouse src-c chimr    | c2099 | 13 | 0.7 | 17 | 1 | AAF91028  | Human multi drug r |
| c2027 | 13.2 | 0.8 | 20 | 1 | ABZ59472  | Human src-c chimr    | c2100 | 13 | 0.7 | 17 | 1 | ABX75014  | Human PAPF-Ea asso |
| c2028 | 13.2 | 0.8 | 20 | 1 | ABZ59425  | Human src-c chimr    | c2101 | 13 | 0.7 | 17 | 1 | ABX56595  | Human CLCA1 gene e |
| c2029 | 13.2 | 0.8 | 20 | 1 | AAD49681  | Human degenerate V   | c2102 | 13 | 0.7 | 17 | 1 | ACC51414  | Human tumour suppr |
| c2030 | 13.2 | 0.8 | 20 | 1 | ABX10794  | Human dual specifi   | c2103 | 13 | 0.7 | 17 | 1 | ABT39785  | Tumour suppression |
| c2031 | 13.2 | 0.8 | 20 | 1 | AAD55465  | Human FGFR-3 antis   | c2104 | 13 | 0.7 | 17 | 1 | ABT39111  | Tumour suppression |
| c2032 | 13.2 | 0.8 | 20 | 1 | ABT32366  | Neuroblastoma-rela   | c2105 | 13 | 0.7 | 17 | 1 | ACD64944  | HCV minus strand D |
| c2033 | 13.2 | 0.8 | 20 | 1 | ADA02095  | Mouse BAX chimeric   | c2106 | 13 | 0.7 | 17 | 1 | ACD64943  | HCV minus strand D |
| c2034 | 13.2 | 0.8 | 20 | 1 | ACC45267  | Human BMCC1 PCR pr   | c2107 | 13 | 0.7 | 17 | 1 | ACD57726  | HCV DNazyme substr |
| c2035 | 13.2 | 0.8 | 20 | 1 | ACF39635  | MHC class II trans   | c2108 | 13 | 0.7 | 17 | 1 | ACF62526  | Cancer based on Cy |
| c2036 | 13.2 | 0.8 | 20 | 1 | ADB17791  | 5' Light chain var   | c2109 | 13 | 0.7 | 17 | 1 | ACF62526  | Murine oligonucleo |
| c2037 | 13.2 | 0.8 | 20 | 1 | AAL61797  | Human ETBR-LP-2 an   | c2110 | 13 | 0.7 | 17 | 1 | ACG67513  | MRP1 based cancer  |
| c2038 | 13.2 | 0.8 | 20 | 1 | ADA38112  | Antisense oligo CG   | c2111 | 13 | 0.7 | 17 | 1 | ADB21197  | Human UGT1A1 varia |
| c2039 | 13.2 | 0.8 | 20 | 1 | ACH11176  | Human protein kina   | c2112 | 13 | 0.7 | 17 | 1 | ADB88286  | Tumour suppression |
| c2040 | 13.2 | 0.8 | 20 | 1 | ABT44381  | Chimeric antisense   | c2113 | 13 | 0.7 | 17 | 1 | ADB42930  | Tumour suppression |
| c2041 | 13.2 | 0.8 | 20 | 1 | ACD55247  | Tumour necrosis fa   | c2114 | 13 | 0.7 | 17 | 1 | ADB97289  | Human MDR1 variant |
| c2042 | 13.2 | 0.8 | 20 | 1 | ACD55291  | Tumour necrosis fa   | c2115 | 13 | 0.7 | 17 | 1 | ADB92460  | Human MDR1 variant |
| c2043 | 13.2 | 0.8 | 20 | 1 | AAL61532  | Microsomal triglyc   | c2116 | 13 | 0.7 | 17 | 1 | ADB45245  | Tumour suppression |
| c2044 | 13.2 | 0.8 | 20 | 1 | ACH66407  | Human inhibitor-ka   | c2117 | 13 | 0.7 | 18 | 1 | AAQ51575  | Bases 1999-2016 of |
| c2045 | 13.2 | 0.8 | 20 | 1 | ADBY4202  | Bovine calcium act   | c2118 | 13 | 0.7 | 18 | 1 | AAQ51575  | HasNPV polyhedrin  |
| c2046 | 13.2 | 0.8 | 20 | 1 | ADBY4202  | Human hepatocyte n   | c2119 | 13 | 0.7 | 18 | 1 | AAV171210 | Probe HBP+248 for  |
| c2047 | 13.2 | 0.8 | 20 | 1 | ADB73445  | Insulin LC REP pro   | c2120 | 13 | 0.7 | 18 | 1 | AAV14082  | L. mexicana kinase |
| c2048 | 13.2 | 0.8 | 20 | 1 | ADB98774  | Human cancer assoc   | c2121 | 13 | 0.7 | 18 | 1 | ABX34424  | PCR primer #1 for  |
| c2049 | 13.2 | 0.8 | 20 | 1 | ADB66620  | LRP5-related oligo   | c2122 | 13 | 0.7 | 18 | 1 | AAAB2433  | cdki ribozyme bind |
| c2050 | 13.2 | 0.8 | 20 | 1 | ADC13630  | Microsomal triglyc   | c2123 | 13 | 0.7 | 19 | 1 | AAAB2433  | Cell-cycle depende |
| c2051 | 13.2 | 0.8 | 20 | 1 | ADC42498  | Human NOVX forward   | c2124 | 13 | 0.7 | 19 | 1 | AAH57595  | Stearoyl-CoA desat |
| c2052 | 13.2 | 0.8 | 20 | 1 | ADC51385  | FANCD2 PCR primer    | c2125 | 13 | 0.7 | 19 | 1 | ADE27072  | Stearoyl-CoA desat |
| c2053 | 13.2 | 0.8 | 20 | 1 | ADC51502  | Human zinc finger    | c2126 | 13 | 0.7 | 20 | 1 | AAQ45346  | 20 alpha-hydroxyat |
| c2054 | 13.2 | 0.8 | 20 | 1 | ADC18673  | Zinc finger protei   | c2127 | 13 | 0.7 | 20 | 1 | AAQ86840  | Antisense oligonuc |
| c2055 | 13.2 | 0.8 | 20 | 1 | ADC35555  | Chimeric oligonuc    | c2128 | 13 | 0.7 | 20 | 1 | AAV14019  | Probe for amplifi  |
| c2056 | 13.2 | 0.8 | 20 | 1 | ADC35555  | Human CB81/TAPA-1    | c2129 | 13 | 0.7 | 20 | 1 | AAV48027  | Murine B7-1 target |
| c2057 | 13.2 | 0.8 | 20 | 1 | ADD11692  | PDE11A PCR primer    | c2130 | 13 | 0.7 | 20 | 1 | AAV53590  | Nucleotide sequenc |
| c2058 | 13.2 | 0.8 | 20 | 1 | ADD14578  | Human src biomarke   | c2131 | 13 | 0.7 | 20 | 1 | AAV53590  | Nucleotide sequenc |
| c2059 | 13.2 | 0.8 | 20 | 1 | ADD31148  | Human microsatelli   | c2132 | 13 | 0.7 | 20 | 1 | AAV53942  | Bos taurus DNase I |
| c2060 | 13.2 | 0.8 | 20 | 1 | ADD31179  | Human microsatelli   | c2133 | 13 | 0.7 | 20 | 1 | AAV29142  | PCR primer for ant |
| c2061 | 13.2 | 0.8 | 20 | 1 | ADD68462  | SNP typing-related   | c2134 | 13 | 0.7 | 20 | 1 | AAV37044  | Human GPC4 exon 7B |
| c2062 | 13.2 | 0.8 | 20 | 1 | ADD62238  | Human haematopiet    | c2135 | 13 | 0.7 | 20 | 1 | AAZ00604  | CDK4 specific anti |
| c2063 | 13.2 | 0.8 | 20 | 1 | ADD56569  | Human gene express   | c2136 | 13 | 0.7 | 20 | 1 | AAZ00604  | Oligonucleotide #1 |
| c2064 | 13.2 | 0.8 | 20 | 1 | ADD313551 | HIA class II allel   | c2137 | 13 | 0.7 | 20 | 1 | AAZ10828  | Oligonucleotide #1 |
| c2065 | 13.2 | 0.8 | 20 | 1 | ADE34268  | Chlamydomonas pall   | c2138 | 13 | 0.7 | 20 | 1 | AAZ10835  | Oligonucleotide #8 |
| c2066 | 13.2 | 0.8 | 20 | 1 | ADE34249  | I-Cpall DSB recogn   | c2139 | 13 | 0.7 | 20 | 1 | AAZ10842  | Oligonucleotide #1 |
| c2067 | 13.2 | 0.8 | 20 | 1 | ADE27764  | Human B7-1 mRNA ta   | c2140 | 13 | 0.7 | 20 | 1 | AAZ33451  | Oryza sativa L. pi |
| c2068 | 13.2 | 0.8 | 20 | 1 | AAAF7411  | Human gene single    | c2141 | 13 | 0.7 | 20 | 1 | AAZ33451  | PCR primer used to |
| c2069 | 13.2 | 0.7 | 13 | 1 | ABH11825  | Oligonucleotide SE   | c2142 | 13 | 0.7 | 20 | 1 | AAZ33694  | PCR primer used to |
| c2070 | 13.2 | 0.7 | 13 | 1 | ABF60423  | Oligonucleotide SE   | c2143 | 13 | 0.7 | 20 | 1 | AAZ01994  | Adenovirus PSE PCR |
| c2071 | 13.2 | 0.7 | 13 | 1 | ABH119824 | Oligonucleotide SE   | c2144 | 13 | 0.7 | 20 | 1 | AAA40839  | Human TNFalpha ant |
| c2072 | 13.2 | 0.7 | 13 | 1 | ABF60422  | Oligonucleotide SE   | c2145 | 13 | 0.7 | 20 | 1 | AAA07645  | HERG gene exon 11/ |
| c2073 | 13.2 | 0.7 | 13 | 1 | ABH22348  | Oligonucleotide SE   | c2146 | 13 | 0.7 | 20 | 1 | AAA55768  | Human DNA methyltr |
| c2074 | 13.2 | 0.7 | 13 | 1 | ABH22357  | Oligonucleotide SE   | c2147 | 13 | 0.7 | 20 | 1 | AAA11847  | Human MDMX antisen |
| c2075 | 13.2 | 0.7 | 13 | 1 | ABH22356  | Oligonucleotide SE   | c2148 | 13 | 0.7 | 20 | 1 | AAAC86526 | PCR primer used to |
| c2076 | 13.2 | 0.7 | 13 | 1 | ABH22349  | Oligonucleotide SE   | c2149 | 13 | 0.7 | 20 | 1 | AAAC62206 | PCR primer used to |
| c2077 | 13.2 | 0.7 | 15 | 1 | AAZ55030  | Human re1A hammet    | c2150 | 13 | 0.7 | 20 | 1 | AAF32869  | Murine B7-1 mRNA a |
|       |      |     |    |   |           | Peptide nucleic ac   | c2150 | 13 | 0.7 | 20 | 1 | AAAC92777 | Human hnRNP A1 pho |



CC inhibits the activity of cyclin-dependent kinase (CDK). Also described  
CC are: (1) a method for screening compounds for their ability to inhibit  
CC the production of beta-amyloid by contacting with beta-amyloid producing  
CC cells; and (2) screening kits. (1) have neurotropic and neuroprotective  
CC activities. (1) suppress the phosphorylation of amyloid precursor protein  
CC (APP) which is an essential step in the production of beta-amyloid. (1)  
CC can be used in the treatment and prevention of neurodegenerative diseases  
CC such as dementia and Alzheimer's disease. The present sequence represents  
CC a PCR primer which is used in the exemplification of the present  
CC invention  
XX  
SQ Sequence 33 BP; 10 A; 11 C; 6 G; 6 T; 0 U; 0 Other;  
Query Match 1.3%; Score 22.4; DB 1; Length 33;  
Best Local Similarity 81.2%; Pred. No. 31;  
Matches 26; Conservative 0; Mismatches 6; Indels 0; Gaps 0;  
QY 1018 GAGCTCAAGCTGGCTGACTTGGCTGGCTGGCCG 1049  
|||||  
DB 32 GAGCTGAAATGGCTAATTTGGCTGGCTG 1  
RESULT 3  
AAI61693/C  
ID AAI61693 standard; DNA; 22 BP.  
XX  
AC AAI61693;  
XX  
DT 22-SEP-2003 (first entry)  
XX  
DE Human PCTAIRE protein kinase 1 DNA specific reverse PCR primer.  
XX  
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PCKX; crks; incontinentia pigmenti; PCR; primer; ss.  
XX  
OS Homo sapiens.  
XX  
FN WO2003049691-A2.  
XX  
PD 19-JUN-2003.  
XX  
PF 06-DEC-2002; 2002WO-US039138.  
XX  
PR 07-DEC-2001; 2001US-00017621.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Freier SM, Roach MP;  
XX  
DR WPI; 2003-577271/54.  
XX  
PT New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
PT gene expression, particularly useful for treating hyperproliferative or  
PT neurological disorders for example, mental retardation, or  
PT thrombocytopaenia.  
XX  
PS Example 13; Page 71; 104pp; English.  
XX  
CC The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
CC PCTAIRE-1, PCK1 and crks). The antisense oligonucleotide is useful for  
CC treating an animal having a disease or condition associated with PCTAIRE  
CC protein kinase 1, particularly a hyperproliferative disease or a  
CC neurological disease. These diseases include thrombocytopaenia, mental  
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
CC particularly useful for inhibiting the expression of PCTAIRE protein  
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
CC or as research reagents or kits. The present sequence is human PCTAIRE

CC protein kinase 1 DNA specific PCR primer. This sequence is used to  
CC illustrate the method of the invention  
XX  
SQ Sequence 22 BP; 3 A; 6 C; 4 G; 9 T; 0 U; 0 Other;  
Query Match 1.3%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 136 AAGAGATCAACGCGAGCTGT 157  
|||||  
DB 22 AAGAAGATCAACGCGAGCTGT 1  
RESULT 4  
AAI30264  
ID AAI30264 standard; DNA; 31 BP.  
XX  
AC AAI30264;  
XX  
DT 18-OCT-2001 (first entry)  
XX  
DE Human single nucleotide polymorphism (SNP) 97.  
XX  
KW Human; resequence; genotype; disease; forensic; paternity testing;  
KW single nucleotide polymorphism; SNP; ss.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT Variation replace(16,T) /tag= a  
FT /standard\_name= "single nucleotide polymorphism"  
XX  
FN WO200166800-A2.  
XX  
PD 13-SEP-2001.  
XX  
PF 07-MAR-2001; 2001WO-US007268.  
XX  
PR 07-MAR-2000; 2000US-0187510P.  
PR 22-MAY-2000; 2000US-0206129P.  
XX  
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
XX  
PI Cargill M, Ireland JS, Lander ES;  
XX  
DR WPI; 2001-522952/57.  
XX  
PT Nucleic acid molecules from the human genome which include polymorphic  
PT sites, useful in methods for predicting the presence, absence or severity  
PT of a particular phenotype or disorder (e.g. diabetes) associated with a  
PT particular genotype.  
XX  
PS Claim 1; Page 75; 145pp; English.  
XX  
CC The invention relates to the identification of nucleic acid molecules  
CC (AAI29513-AAI31314) from the human genome which include polymorphic sites  
CC which can predispose individuals to disease. Various genes from a number  
CC of individuals were resequenced and single nucleotide polymorphisms  
CC (SNPs) in these genes discovered. The method is useful for predicting the  
CC presence, absence or severity of a particular phenotype or disorder (e.g.  
CC diabetes) associated with a particular genotype. The nucleic acids  
CC containing the polymorphic sites may be useful in forensics and paternity  
CC testing  
XX  
SQ Sequence 31 BP; 8 A; 11 C; 8 G; 4 T; 0 U; 0 Other;  
Query Match 1.3%; Score 22; DB 1; Length 31;  
Best Local Similarity 83.3%; Pred. No. 35;  
Matches 25; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
QY 979 GACCTCAAGCCCAAGACCTGCTCATCAAC 1008



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DT 12-SEP-2001 (first entry)
XX PCTAIRE-1 polymorphism containing DNA fragment #96.
XX Single nucleotide polymorphism; SNP; human; cancer; inflammation;
XX heart disease; paternity testing; forensic science; ds.
XX Homo sapiens.
XX Key Location/Qualifiers
XX Variation replace(11,G)
XX /*tag= a
XX /standard_name= "single nucleotide polymorphism"
XX WO200138576-A2.
XX 31-MAY-2001.
XX 17-NOV-2000; 2000WO-US031639.
XX 24-NOV-1999; 99US-0167334P.
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX Cargill M, Ireland JS, Lander ES;
XX WPI; 2001-367705/38.
XX New nucleic acid segments of the human genome, particularly from genes
XX including polymorphic sites, for phenotype correlation, forensics,
XX paternity testing, medicine and genetic analysis.
XX Claim 1; Page 37; 80pp; English.
XX DNA sequences AAH62100 - AAH62688 represent segments of human genes which
XX contain single nucleotide polymorphisms (SNPs). A method is included in
XX the invention for analysing a nucleic acid sample, which consists of
XX determining the base occupying any one of the polymorphic sites given in
XX the SNP containing sequences. The nucleotide sequences can be used in the
XX diagnosis or monitoring of diseases, such as cancer, inflammation, heart
XX diseases, diseases of the cardiovascular system, and infection by
XX microorganisms. The oligonucleotides are also useful in the manufacture
XX of a medicament for the treatment of prophyaxis of the diseases, and as
XX a pharmaceutical. SNP containing oligonucleotides are useful in
XX applications such as phenotype correlation, forensics, paternity testing,
XX medicine and genetic analysis
XX Sequence 21 BP; 9 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
XX Query Match 1.2%; Score 21; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 35;
XX Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 702 CAAGGAGATCAGACTGGAAACA 722
DB 1 CAAGGAGATCAGACTGGAAACA 21
RESULT 7
AAH61700/c
ID AAL61700 standard; DNA; 20 BP.
XX
XX AAL61700;
XX
XX 22-SEP-2003 (first entry)
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204137.
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopaenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW
```

```
DT 12-SEP-2001 (first entry)
XX PCTAIRE-1 polymorphism containing DNA fragment #96.
XX Single nucleotide polymorphism; SNP; human; cancer; inflammation;
XX heart disease; paternity testing; forensic science; ds.
XX Homo sapiens.
XX Key Location/Qualifiers
XX Variation replace(11,G)
XX /*tag= a
XX /standard_name= "single nucleotide polymorphism"
XX WO200138576-A2.
XX 31-MAY-2001.
XX 17-NOV-2000; 2000WO-US031639.
XX 24-NOV-1999; 99US-0167334P.
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX Cargill M, Ireland JS, Lander ES;
XX WPI; 2001-367705/38.
XX New nucleic acid segments of the human genome, particularly from genes
XX including polymorphic sites, for phenotype correlation, forensics,
XX paternity testing, medicine and genetic analysis.
XX Claim 1; Page 37; 80pp; English.
XX DNA sequences AAH62100 - AAH62688 represent segments of human genes which
XX contain single nucleotide polymorphisms (SNPs). A method is included in
XX the invention for analysing a nucleic acid sample, which consists of
XX determining the base occupying any one of the polymorphic sites given in
XX the SNP containing sequences. The nucleotide sequences can be used in the
XX diagnosis or monitoring of diseases, such as cancer, inflammation, heart
XX diseases, diseases of the cardiovascular system, and infection by
XX microorganisms. The oligonucleotides are also useful in the manufacture
XX of a medicament for the treatment of prophyaxis of the diseases, and as
XX a pharmaceutical. SNP containing oligonucleotides are useful in
XX applications such as phenotype correlation, forensics, paternity testing,
XX medicine and genetic analysis
XX Sequence 21 BP; 9 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
XX Query Match 1.2%; Score 21; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 35;
XX Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 702 CAAGGAGATCAGACTGGAAACA 722
DB 1 CAAGGAGATCAGACTGGAAACA 21
RESULT 7
AAH61700/c
ID AAL61700 standard; DNA; 20 BP.
XX
XX AAL61700;
XX
XX 22-SEP-2003 (first entry)
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204137.
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopaenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW
```

```
DT 12-SEP-2001 (first entry)
XX PCTAIRE-1 polymorphism containing DNA fragment #96.
XX Single nucleotide polymorphism; SNP; human; cancer; inflammation;
XX heart disease; paternity testing; forensic science; ds.
XX Homo sapiens.
XX Key Location/Qualifiers
XX Variation replace(11,G)
XX /*tag= a
XX /standard_name= "single nucleotide polymorphism"
XX WO200138576-A2.
XX 31-MAY-2001.
XX 17-NOV-2000; 2000WO-US031639.
XX 24-NOV-1999; 99US-0167334P.
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX Cargill M, Ireland JS, Lander ES;
XX WPI; 2001-367705/38.
XX New nucleic acid segments of the human genome, particularly from genes
XX including polymorphic sites, for phenotype correlation, forensics,
XX paternity testing, medicine and genetic analysis.
XX Claim 1; Page 37; 80pp; English.
XX DNA sequences AAH62100 - AAH62688 represent segments of human genes which
XX contain single nucleotide polymorphisms (SNPs). A method is included in
XX the invention for analysing a nucleic acid sample, which consists of
XX determining the base occupying any one of the polymorphic sites given in
XX the SNP containing sequences. The nucleotide sequences can be used in the
XX diagnosis or monitoring of diseases, such as cancer, inflammation, heart
XX diseases, diseases of the cardiovascular system, and infection by
XX microorganisms. The oligonucleotides are also useful in the manufacture
XX of a medicament for the treatment of prophyaxis of the diseases, and as
XX a pharmaceutical. SNP containing oligonucleotides are useful in
XX applications such as phenotype correlation, forensics, paternity testing,
XX medicine and genetic analysis
XX Sequence 21 BP; 9 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
XX Query Match 1.2%; Score 21; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 35;
XX Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 702 CAAGGAGATCAGACTGGAAACA 722
DB 1 CAAGGAGATCAGACTGGAAACA 21
RESULT 7
AAH61700/c
ID AAL61700 standard; DNA; 20 BP.
XX
XX AAL61700;
XX
XX 22-SEP-2003 (first entry)
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204137.
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopaenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW
```







CC neurological disease. These diseases include thrombocytopenia, mental  
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
CC particularly useful for inhibiting the expression of PCTAIRE protein  
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
CC or as research reagents or kits. The present sequence is an antisense  
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
CC sequence is used to illustrate the method of the invention  
XX  
SQ Sequence 20 BP; 7 A; 2 C; 7 G; 4 T; 0 U; 0 Other;  
  
Query Match 1.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 53;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1232 AGCTACACTTCATCTCCCGT 1251  
DB 20 AGCTACACTTCATCTCCCGT 1  
  
RESULT 11  
AAL61759/c  
ID AAL61759 standard; DNA; 20 BP.  
XX  
AC AAL61759;  
XX  
DT 22-SEP-2003 (first entry)  
XX  
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204196.  
XX  
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW hyperproliferative disease; neurological disease; thrombocytopenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidines are 5-  
FT methylethylenes"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
FT modified\_base 16..20  
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XX  
PD 19-JUN-2003.  
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PF 06-DEC-2002; 2002WO-US039138.  
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PR 07-DEC-2001; 2001US-00017621.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Freier SM, Roach MP;  
XX  
XX WPI; 2003-577271/54.  
XX  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
XX gene expression, particularly useful for treating hyperproliferative or  
XX neurological disorders for example, mental retardation, or

FT thrombocytopenia.  
XX  
PS Claim 3; Page 75; 104pp; English.  
XX  
CC The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
CC treating an animal having a disease or condition associated with PCTAIRE  
CC protein kinase 1, particularly a hyperproliferative disease or a  
CC neurological disease. These diseases include thrombocytopenia, mental  
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
CC particularly useful for inhibiting the expression of PCTAIRE protein  
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
CC or as research reagents or kits. The present sequence is an antisense  
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
CC sequence is used to illustrate the method of the invention  
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DT 22-SEP-2003 (first entry)  
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KW hyperproliferative disease; neurological disease; thrombocytopenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.  
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PR 07-DEC-2001; 2001US-00017621.  
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PA (ISIS-) ISIS PHARM INC.  
XX Freier SM, Roach MP;  
PI WPI; 2003-577271/54.  
XX  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
XX gene expression, particularly useful for treating hyperproliferative or  
XX neurological disorders for example, mental retardation, or  
XX thrombocytopenia.  
XX  
XX Claim 3; Page 75; 104pp; English.  
XX  
XX The invention relates to antisense compounds, compositions and methods  
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as  
XX PCTAIRE-1, PCK1 and crk5). The antisense oligonucleotide is useful for  
XX treating an animal having a disease or condition associated with PCTAIRE  
XX protein kinase 1, particularly a hyperproliferative disease or a  
XX neurological disease. These diseases include thrombocytopenia, mental  
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is  
XX particularly useful for inhibiting the expression of PCTAIRE protein  
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
XX or as research reagents or kits. The present sequence is an antisense  
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This  
XX sequence is used to illustrate the method of the invention  
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XX AC AAL61772;  
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XX hyperproliferative disease; neurological disease; thrombocytopenia;  
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
XX PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
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XX WO2003049691-A2.  
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XX 19-JUN-2003.  
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XX 07-DEC-2001; 2001US-00017621.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Freier SM, Roach MP;  
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XX WPI; 2003-577271/54.  
XX  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
XX gene expression, particularly useful for treating hyperproliferative or  
XX neurological disorders for example, mental retardation, or  
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XX  
XX Claim 3; Page 75; 104pp; English.  
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XX The invention relates to antisense compounds, compositions and methods  
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XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is  
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XX or as research reagents or kits. The present sequence is an antisense  
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This  
XX sequence is used to illustrate the method of the invention  
XX  
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XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
XX PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
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XX 19-JUN-2003.
PD
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XX 06-DEC-2002; 2002WO-US039138.
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XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
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XX neurological disease. These diseases include thrombocytopenia, mental
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XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
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XX Sequence 20 BP; 2 A; 9 C; 5 G; 4 T; 0 U; 0 Other;
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XX RESULT 15
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XX 22-SEP-2003 (first entry)
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XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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XX 06-DEC-2002; 2002WO-US039138.
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XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PCK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
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XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
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XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
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XX 22-SEP-2003 (first entry)
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KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
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KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
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OS Synthetic.
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XX WO2003049691-A2.
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XX 19-JUN-2003.
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XX 06-DEC-2002; 2002WO-US039138.
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XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTARE protein kinase 1 (also known as PCTARE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTARE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental

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XX PS Claim 3; Page 74; 104pp; English.
XX PI
XX CC The invention relates to antisense compounds, compositions and methods
XX CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX CC PCTAIRE-1, PCK1 and crk5). The antisense oligonucleotide is useful for
XX CC treating an animal having a disease or condition associated with PCTAIRE
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XX CC neurological disease. These diseases include thrombocytopaenia, mental
XX CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX CC particularly useful for inhibiting the expression of PCTAIRE protein
XX CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX CC or as research reagents or kits. The present sequence is an antisense
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XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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XX (ISIS-) ISIS PHARM INC.

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XX PI Freier SM, Roach MP;
XX CC WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopaenia.
XX
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XX sequence is used to illustrate the method of the invention
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XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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XX Synthetic.
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PN WO2003049691-A2.
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PF
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XX 07-DEC-2001; 2001US-00017621.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
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XX Freier SM, Roach MP;
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XX WPI; 2003-577271/54.
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XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
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XX
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CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
SQ
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Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1533 ACAAAAGGAGGCCAGCCTTC 1552
DB 20 ACAAAAGGAGGCCAGCCTTC 1
RESULT 22
AAL61768/c
ID AAL61768 standard; DNA; 20 BP.
XX
XX AAL61768;
AC
XX
XX 22-SEP-2003 (first entry)
DT
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204205.
DE
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
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OS
XX Synthetic.
OS
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FT methylcytidines"

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XX
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PN
XX
XX 19-JUN-2003.
PD
XX
XX 06-DEC-2002; 2002WO-US039138.
PF
XX
XX 07-DEC-2001; 2001US-00017621.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Freier SM, Roach MP;
PI
XX
XX WPI; 2003-577271/54.
DR
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
PS
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1558 TCGTCGATGCTGACTCAGG 1577
DB 20 TCGTCGATGCTGACTCAGG 1
RESULT 23
AAL61718/c
ID AAL61718 standard; DNA; 20 BP.
XX
XX AAL61718;
AC
XX
XX 22-SEP-2003 (first entry)
DT
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204155.
DE
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX

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OS Synthetic.  
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XX WO2003049691-A2.  
XX  
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XX 19-JUN-2003.  
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XX  
XX 06-DEC-2002; 2002WO-US039138.  
XX  
XX 07-DEC-2001; 2001US-00017621.  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Freier SM, Roach MP;  
XX WPI; 2003-577271/54.  
XX  
XX The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention  
XX Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;  
XX  
XX Query Match 1.1%; Score 20; DB 1; Length 20;  
XX Best Local Similarity 100.0%; Pred.No. 53;  
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 312 CAGCTCTGCACGAGATTG 331  
DB 20 CAGCTCTGCACGAGATTG 1  
RESULT 24  
ID AAL61728/c  
XX AAL61728 standard; DNA; 20 BP.  
XX  
XX AAL61728;  
XX  
XX 22-SEP-2003 (first entry)  
XX

DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204165.  
XX  
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone; antisense; ss.  
XX  
XX Homo sapiens.  
OS Synthetic.  
OS  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
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FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"  
FT modified\_base 1..5  
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FT /mod\_base= OTHER  
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XX WO2003049691-A2.  
XX  
XX 19-JUN-2003.  
XX  
XX 06-DEC-2002; 2002WO-US039138.  
XX  
XX 07-DEC-2001; 2001US-00017621.  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Freier SM, Roach MP;  
XX WPI; 2003-577271/54.  
XX  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopaenia.  
XX  
XX Claim 3; Page 74; 104pp; English.  
XX  
XX The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention  
XX Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;  
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DB 20 GCGCTATCACTACCAGCTG 1

Query Match 1.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred.No. 53;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1391 TCACCAAGCTGTCAGTTT 1410  
Db 20 TCACCAAGCTGTCAGTTT 1

RESULT 26  
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ID AAL61758 standard; DNA; 20 BP.  
AC AAL61758;  
XX  
DT 22-SEP-2003 (first entry)  
XX  
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204195.  
XX  
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW hyperproliferative disease; neurological disease; thrombocytopenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
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FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"  
FT modified\_base 1..5  
FT /\*tag= b  
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XX  
PN WO2003049691-A2.  
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PD 19-JUN-2003.  
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PF 06-DEC-2002; 2002WO-US039138.  
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PR 07-DEC-2001; 2001US-00017621.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Freier SM, Roach MP;  
XX  
PS WPI; 2003-577271/54.  
XX  
CC New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
CC gene expression, particularly useful for treating hyperproliferative or  
CC neurological disorders for example, mental retardation, or  
CC thrombocytopenia.  
XX  
CC Claim 3; Page 75; 104pp; English.  
XX  
CC The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
CC treating an animal having a disease or condition associated with PCTAIRE  
CC protein kinase 1, particularly a hyperproliferative disease or a  
CC neurological disease. These diseases include thrombocytopenia, mental  
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
CC particularly useful for inhibiting the expression of PCTAIRE protein  
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
CC or as research reagents or kits. The present sequence is an antisense  
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
CC sequence is used to illustrate the method of the invention

RESULT 25  
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ID AAL61753 standard; DNA; 20 BP.  
XX  
AC AAL61753;  
XX  
DT 22-SEP-2003 (first entry)  
XX  
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204190.  
XX  
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW hyperproliferative disease; neurological disease; thrombocytopenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
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PN WO2003049691-A2.  
XX  
PD 19-JUN-2003.  
XX  
PF 06-DEC-2002; 2002WO-US039138.  
XX  
PR 07-DEC-2001; 2001US-00017621.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Freier SM, Roach MP;  
XX  
PS WPI; 2003-577271/54.  
XX  
CC New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
CC gene expression, particularly useful for treating hyperproliferative or  
CC neurological disorders for example, mental retardation, or  
CC thrombocytopenia.  
XX  
CC Claim 3; Page 74; 104pp; English.  
XX  
CC The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
CC treating an animal having a disease or condition associated with PCTAIRE  
CC protein kinase 1, particularly a hyperproliferative disease or a  
CC neurological disease. These diseases include thrombocytopenia, mental  
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
CC particularly useful for inhibiting the expression of PCTAIRE protein  
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
CC or as research reagents or kits. The present sequence is an antisense  
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
CC sequence is used to illustrate the method of the invention

CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
 CC particularly useful for inhibiting the expression of PCTAIRE protein  
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
 CC or as research reagents or kits. The present sequence is an antisense  
 CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This  
 CC sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 7 A; 1 C; 8 G; 4 T; 0 U; 0 Other;

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 Db 20 ACATCCATTCTCTCAGTC 1

RESULT 27  
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 AC AAL61770;  
 XX 22-SEP-2003 (first entry)  
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 KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
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 XX 19-JUN-2003.  
 XX 06-DEC-2002; 2002WO-US039138.  
 XX 07-DEC-2001; 2001US-00017621.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Freier SM, Roach MP;  
 XX WPI; 2003-577271/54.  
 XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
 PT gene expression, particularly useful for treating hyperproliferative or  
 PT neurological disorders for example, mental retardation, or  
 PT thrombocytopaenia.

PS Claim 3; Page 75; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods  
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
 CC treating an animal having a disease or condition associated with PCTAIRE  
 CC protein kinase 1, particularly a hyperproliferative disease or a  
 CC neurological disease. These diseases include thrombocytopaenia, mental  
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
 CC particularly useful for inhibiting the expression of PCTAIRE protein  
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
 CC or as research reagents or kits. The present sequence is an antisense  
 CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This  
 CC sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 53;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1582 CCAGCTTCGCGTGGGA 1601

Db 20 CCAGCTTCGCGTGGGA 1

RESULT 28

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ID AAL61715 standard; DNA; 20 BP.

XX AAL61715;

AC AAL61715;

XX 22-SEP-2003 (first entry)

XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204152.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
 KW antisense; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

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FT /note= "Phosphorothioate backbone; All cytidines are 5-  
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 XX WO2003049691-A2.  
 XX 19-JUN-2003.  
 XX 06-DEC-2002; 2002WO-US039138.  
 XX 07-DEC-2001; 2001US-00017621.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Freier SM, Roach MP;  
 XX WPI; 2003-577271/54.  
 XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
 PT gene expression, particularly useful for treating hyperproliferative or  
 PT neurological disorders for example, mental retardation, or  
 PT thrombocytopaenia.

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PI Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
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Best Local Similarity 100.0%; Pred. No. 53;
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DB 20 CTGGGGAACCTCGTTCGCA 1
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XX 22-SEP-2003 (first entry)
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XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
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XX Synthetic.
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XX WO2003049691-A2.

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XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
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XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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DB 20 AGGCTACCTGGAGAGCTG 1
RESULT 30
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ID AAL61745 standard; DNA; 20 BP.
XX
XX AAL61745;
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204182.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX Homo sapiens.
XX Synthetic.
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XX Key Location/Qualifiers
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XX methylethylenes"
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FT /\*tag= b  
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 FT /note= "2'methoxyethyl nucleotides"  
 XX WO2003049691-A2.  
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 XX 19-JUN-2003.  
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 XX 06-DEC-2002; 2002WO-US039138.  
 XX  
 XX 07-DEC-2001; 2001US-00017621.  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Freier SM, Roach MP;  
 XX WPI; 2003-577271/54.  
 XX  
 XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
 PT gene expression, particularly useful for treating hyperproliferative or  
 PT neurological disorders for example, mental retardation, or  
 PT thrombocytopenia.  
 XX  
 XX Claim 3; Page 74; 104pp; English.

CC The invention relates to antisense compounds, compositions and methods  
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
 CC PCTAIRE-1, PTK1 and CRK5). The antisense oligonucleotide is useful for  
 CC treating an animal having a disease or condition associated with PCTAIRE  
 CC protein kinase 1, particularly a hyperproliferative disease or a  
 CC neurological disease. These diseases include thrombocytopenia, mental  
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
 CC particularly useful for inhibiting the expression of PCTAIRE protein  
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
 CC or as research reagents or kits. The present sequence is an antisense  
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
 CC sequence is used to illustrate the method of the invention  
 XX  
 XX Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 53;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1114 GACATCCTGCTGGGTCAC 1133  
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 Db 20 GACATCCTGCTGGGTCAC 1

RESULT 31  
 AAL61757/c  
 ID AAL61757 standard; DNA; 20 BP.

XX AAL61757;  
 XX  
 XX 22-SEP-2003 (first entry)  
 XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204194.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
 KW hyperproliferative disease; neurological disease; thrombocytopenia;  
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
 KW PTK1; CRK5; incontinentia pigmenti; phosphorothioate backbone;  
 KW antisense; ss.  
 XX  
 XX Homo sapiens.

OS Synthetic.  
 XX Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
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 FT /note= "Phosphorothioate backbone; All cytidines are 5-  
 FT methylcytidines"  
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 FT /\*tag= b  
 FT /mod\_base= OTHER  
 FT /note= "2'methoxyethyl nucleotides"  
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 XX WO2003049691-A2.  
 XX  
 XX 19-JUN-2003.  
 XX  
 XX 06-DEC-2002; 2002WO-US039138.  
 XX  
 XX 07-DEC-2001; 2001US-00017621.  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Freier SM, Roach MP;  
 XX WPI; 2003-577271/54.  
 XX  
 XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
 PT gene expression, particularly useful for treating hyperproliferative or  
 PT neurological disorders for example, mental retardation, or  
 PT thrombocytopenia.  
 XX  
 XX Claim 3; Page 75; 104pp; English.

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 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
 CC PCTAIRE-1, PTK1 and CRK5). The antisense oligonucleotide is useful for  
 CC treating an animal having a disease or condition associated with PCTAIRE  
 CC protein kinase 1, particularly a hyperproliferative disease or a  
 CC neurological disease. These diseases include thrombocytopenia, mental  
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
 CC particularly useful for inhibiting the expression of PCTAIRE protein  
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
 CC or as research reagents or kits. The present sequence is an antisense  
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
 CC sequence is used to illustrate the method of the invention  
 XX  
 XX Sequence 20 BP; 3 A; 4 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 53;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1436 AGGATGCCATGAAACATCCA 1455  
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 Db 20 AGGATGCCATGAAACATCCA 1

RESULT 32  
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 ID AAL61764 standard; DNA; 20 BP.  
 XX  
 XX AAL61764;  
 XX 22-SEP-2003 (first entry)  
 XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204201.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW hyperproliferative disease; neurological disease; thrombocytopenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.  
XX  
XX Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1. .20  
FT /tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidines are 5-  
FT methylethyridines"  
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FT /tag= b  
FT /mod\_base= OTHER  
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XX WO2003049691-A2.  
XX  
XX 19-JUN-2003.  
XX  
XX 06-DEC-2002; 2002WO-US039138.  
XX  
XX 07-DEC-2001; 2001US-00017621.  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Freier SM, Roach MP;  
XX WPI; 2003-577271/54.  
XX  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
PT gene expression, particularly useful for treating hyperproliferative or  
PT neurological disorders for example, mental retardation, or  
PT thrombocytopenia.  
XX  
XX Claim 3; Page 75; 104pp; English.  
XX  
XX The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
CC treating an animal having a disease or condition associated with PCTAIRE  
CC protein kinase 1, particularly a hyperproliferative disease or a  
CC neurological disease. These diseases include thrombocytopenia, mental  
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
CC particularly useful for inhibiting the expression of PCTAIRE protein  
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
CC or as research reagents or kits. The present sequence is an antisense  
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This  
CC sequence is used to illustrate the method of the invention  
XX  
XX Sequence 20 BP; 5 A; 4 C; 3 G; 8 T; 0 U; 0 Other;  
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XX Query Match 1.1%; Score 20; DB 1; Length 20;  
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XX |||||  
XX 20 CATATTTCGCACTAAGGAGA 1

RESULT 33  
AAL61726/C  
ID AAL61726 standard; DNA; 20 BP.  
XX AAL61726;  
XX  
XX 22-SEP-2003 (first entry)  
XX  
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204163.  
XX  
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW hyperproliferative disease; neurological disease; thrombocytopenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.  
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XX Homo sapiens.  
OS Synthetic.  
XX  
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FT modified\_base 1. .20  
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FT methylethyridines"  
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FT /tag= c  
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XX WO2003049691-A2.  
XX  
XX 19-JUN-2003.  
XX  
XX 06-DEC-2002; 2002WO-US039138.  
XX  
XX 07-DEC-2001; 2001US-00017621.  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Freier SM, Roach MP;  
XX WPI; 2003-577271/54.  
XX  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
PT gene expression, particularly useful for treating hyperproliferative or  
PT neurological disorders for example, mental retardation, or  
PT thrombocytopenia.  
XX  
XX Claim 3; Page 74; 104pp; English.  
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XX The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
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CC neurological disease. These diseases include thrombocytopenia, mental  
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
CC particularly useful for inhibiting the expression of PCTAIRE protein  
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
CC or as research reagents or kits. The present sequence is an antisense  
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This  
CC sequence is used to illustrate the method of the invention  
XX  
XX Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 53;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 445 AAGATCTCCACTGAGGACAT 464  
20 AAGATCTCCACTGAGGACAT 1

Db

RESULT 34  
AAL61740/C  
ID AAL61740 standard; DNA; 20 BP.  
XX  
AC AAL61740;  
XX  
DT 22-SEP-2003 (first entry)  
XX  
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204177.  
XX  
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidines are 5-methycytidines"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
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XX  
FN WO2003049691-A2.  
XX  
PD 19-JUN-2003.  
XX  
PF 06-DEC-2002; 2002WO-US039138.  
XX  
PR 07-DEC-2001; 2001US-00017621.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Freier SM, Roach MP;  
XX  
DR WPI; 2003-577271/54.  
XX  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia.  
XX  
PS Claim 3; Page 74; 104pp; English.

The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth

CC disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention

XX  
SQ Sequence 20 BP; 7 A; 3 C; 4 G; 6 T; 0 U; 0 Other;

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Best Local Similarity 100.0%; Pred. No. 53;  
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OY 793 GTTACGCTACATGACATTAT 812  
20 GTTACGCTACATGACATTAT 1

Db

RESULT 35  
AAL61741/C  
ID AAL61741 standard; DNA; 20 BP.  
XX  
AC AAL61741;  
XX  
DT 22-SEP-2003 (first entry)  
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DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204178.  
XX  
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidines are 5-methycytidines"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
XX  
FN WO2003049691-A2.  
XX  
PD 19-JUN-2003.  
XX  
PF 06-DEC-2002; 2002WO-US039138.  
XX  
PR 07-DEC-2001; 2001US-00017621.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Freier SM, Roach MP;  
XX  
DR WPI; 2003-577271/54.  
XX  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia.  
XX  
PS Claim 3; Page 74; 104pp; English.



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CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
CC treating an animal having a disease or condition associated with PCTAIRE  
CC protein kinase 1, particularly a hyperproliferative disease or a  
CC neurological disease. These diseases include thrombocytopaenia, mental  
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
CC particularly useful for inhibiting the expression of PCTAIRE protein  
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
CC or as research reagents or kits. The present sequence is an antisense  
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
CC sequence is used to illustrate the method of the invention  
XX  
XX Sequence 20 BP; 2 A; 4 C; 8 G; 6 T; 0 U; 0 Other;  
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Best Local Similarity 100.0%; Pred. No. 53;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 814 CACACGGAGAGTCCCTCAC 833  
Db 20 CACACGGAGAGTCCCTCAC 1  
RESULT 36  
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ID AAL61760 standard; DNA; 20 BP.  
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AC AAL61760;  
XX  
DT 22-SEP-2003 (first entry)  
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DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204197.  
XX  
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /tag= a  
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FN WO2003049691-A2.  
PD 19-JUN-2003.  
XX  
PF 06-DEC-2002; 2002WO-US039138.  
XX  
PR 07-DEC-2001; 2001US-00017621.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Freier SM, Roach MP;

XX MPI; 2003-577271/54.  
XX  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
PT gene expression, particularly useful for treating hyperproliferative or  
PT neurological disorders for example, mental retardation, cr  
PT thrombocytopaenia.  
XX  
XX Claim 3; Page 75; 104pp; English.  
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XX The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
CC treating an animal having a disease or condition associated with PCTAIRE  
CC protein kinase 1, particularly a hyperproliferative disease or a  
CC neurological disease. These diseases include thrombocytopaenia, mental  
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
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CC particularly useful for inhibiting the expression of PCTAIRE protein  
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CC or as research reagents or kits. The present sequence is an antisense  
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
CC sequence is used to illustrate the method of the invention  
XX  
XX Sequence 20 BP; 3 A; 9 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 1.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 53;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
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AC AAL61771;  
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DT 22-SEP-2003 (first entry)  
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KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.  
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OS Homo sapiens.  
OS Synthetic.  
XX  
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FT methylethylenes"  
FT modified\_base 1..5  
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FT /mod\_base= OTHER  
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FN WO2003049691-A2.

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PD 19-JUN-2003.
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XX 06-DEC-2002; 2002WO-US039138.
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XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
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XX The invention relates to antisense compounds, compositions and methods
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XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 53;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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XX 20 TGGACACCGAGTCTAAGCC 1
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XX Db
XX
XX RESULT 38
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XX ID AAL61704 standard; DNA; 20 BP.
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XX AC AAL61704;
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XX 22-SEP-2003 (first entry)
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XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204141.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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XX Synthetic.
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XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
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XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
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XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
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XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 53;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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XX QY 117 GATGCCCATGGATCGATGA 136
XX 20 GATGCCCATGGATCGATGA 1
XX
XX Db
XX
XX RESULT 39
XX AAL61707/c
XX ID AAL61707 standard; DNA; 20 BP.
XX
XX AC AAL61707;
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XX 22-SEP-2003 (first entry)
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XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
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XX Synthetic.
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FT methylethyldines"
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XX WO2003049691-A2.
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 3 A; 6 C; 4 G; 7 T; 0 U; 0 Other;
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XX ID AAL61724 standard; DNA; 20 BP.
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XX AC AAL61724;
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XX XX 22-SEP-2003 (first entry)
XX
XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204161.
XX
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KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
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XX Synthetic.
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FT methylethyldines"
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XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
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XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopaenia.
XX
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
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XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
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XX QY 406 TCTCCAGTGAGAGTGGGTAT 425
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ID AAL61729 standard; DNA; 20 BP.  
XX  
AC AAL61729;  
XX  
DT 22-SEP-2003 (first entry)  
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XX  
DE Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.  
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OS Synthetic.  
XX  
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XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
PI Freier SM, Roach MP;  
XX  
XX WPI; 2003-577271/54.  
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XX The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
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CC neurological disease. These diseases include thrombocytopaenia, mental  
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
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CC particularly useful for inhibiting the expression of PCTAIRE protein  
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CC or as research reagents or kits. The present sequence is an antisense  
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This  
CC sequence is used to illustrate the method of the invention  
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DT 22-SEP-2003 (first entry)  
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DE Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.  
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OS Synthetic.  
XX  
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PD 19-JUN-2003.  
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PF 06-DEC-2002; 2002WO-US039138.  
XX  
PR 07-DEC-2001; 2001US-00017621.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
PI Freier SM, Roach MP;  
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XX WPI; 2003-577271/54.  
XX  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
PT gene expression, particularly useful for treating hyperproliferative or  
PT neurological disorders for example, mental retardation, or  
PT thrombocytopaenia.  
XX  
PS Claim 3; Page 74; 104pp; English.  
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CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
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CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
CC particularly useful for inhibiting the expression of PCTAIRE protein  
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CC or as research reagents or kits. The present sequence is an antisense  
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This  
CC sequence is used to illustrate the method of the invention  
XX  
SQ Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

CC particularly useful for inhibiting the expression of PCTAIRE protein  
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
 CC or as research reagents or kits. The present sequence is an antisense  
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
 CC sequence is used to illustrate the method of the invention  
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 AC AAL61748;  
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 DT 22-SEP-2003 (first entry)  
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 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
 KW antisense; ss.  
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 PF 06-DEC-2002; 2002WO-US039138.  
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 PR 07-DEC-2001; 2001US-00017621.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Freier SM, Roach MP;  
 XX  
 DR WPI; 2003-577271/54.  
 XX  
 XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
 PT gene expression, particularly useful for treating hyperproliferative or  
 PT neurological disorders for example, mental retardation, or  
 PT thrombocytopenia.  
 XX  
 PS Claim 3; Page 74; 104pp; English.  
 XX

CC The invention relates to antisense compounds, compositions and methods  
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
 CC treating an animal having a disease or condition associated with PCTAIRE  
 CC protein kinase 1, particularly a hyperproliferative disease or a  
 CC neurological disease. These diseases include thrombocytopaenia, mental  
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
 CC particularly useful for inhibiting the expression of PCTAIRE protein  
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
 CC or as research reagents or kits. The present sequence is an antisense  
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
 CC sequence is used to illustrate the method of the invention  
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 KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
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 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
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 PD 19-JUN-2003.  
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 PF 06-DEC-2002; 2002WO-US039138.  
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 PR 07-DEC-2001; 2001US-00017621.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Freier SM, Roach MP;  
 XX

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DR WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 73; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
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CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
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KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
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XX WO2003049691-A2.
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XX 19-JUN-2003.
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XX 06-DEC-2002; 2002WO-US039138.
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XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
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CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
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CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
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KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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OS Synthetic.
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XX 07-DEC-2001; 2001US-00017621.  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Freier SM, Roach MP;  
XX  
XX WPI; 2003-577271/54.  
XX  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
PT gene expression, particularly useful for treating hyperproliferative or  
PT neurological disorders for example, mental retardation, or  
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XX  
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CC sequence is used to illustrate the method of the invention  
XX  
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KW hyperproliferative disease; neurological disease; thrombocytopenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.  
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XX Homo sapiens.  
OS Synthetic.  
XX
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FH Key Location/Qualifiers  
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FT /mod_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidines are 5-  
FT methylcytidines"  
FT 1..5  
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FT /note= "2'methoxyethyl nucleotides"  
FT 16..20  
FT /*tag= c  
FT /mod_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
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XX WO2003049691-A2.  
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XX 06-DEC-2002; 2002WO-US039138.  
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XX 07-DEC-2001; 2001US-00017621.  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Freier SM, Roach MP;  
XX  
XX WPI; 2003-577271/54.  
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CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
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CC or as research reagents or kits. The present sequence is an antisense  
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
CC sequence is used to illustrate the method of the invention  
XX  
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KW
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KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.  
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OS Synthetic.  
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XX  
XX WO2003049691-A2.  
XX  
XX 19-JUN-2003.  
XX  
XX 06-DEC-2002; 2002WO-US039138.  
XX  
XX 07-DEC-2001; 2001US-00017621.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Freier SM, Roach MP;  
XX WPI; 2003-577271/54.  
XX  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
PT gene expression, particularly useful for treating hyperproliferative or  
PT neurological disorders for example, mental retardation, or  
PT thrombocytopaenia.  
XX  
XX Claim 3; Page 74; 104pp; English.  
XX  
XX The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
CC treating an animal having a disease or condition associated with PCTAIRE  
CC protein kinase 1, particularly a hyperproliferative disease or a  
CC neurological disease. These diseases include thrombocytopaenia, mental  
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
CC particularly useful for inhibiting the expression of PCTAIRE protein  
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
CC or as research reagents or kits. The present sequence is an antisense  
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
CC sequence is used to illustrate the method of the invention  
XX  
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Best Local Similarity 100.0%; Pred.No. 53;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
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Db 20 TGCTCAGGACCTCAACAC 1

RESULT 49  
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ID AAL61766 standard; DNA; 20 BP.  
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XX AAL61766;  
XX  
XX 22-SEP-2003 (first entry)  
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XX  
XX  
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.  
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OS Synthetic.  
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XX WO2003049691-A2.  
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XX 19-JUN-2003.  
XX  
XX 06-DEC-2002; 2002WO-US039138.  
XX  
XX 07-DEC-2001; 2001US-00017621.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Freier SM, Roach MP;  
XX WPI; 2003-577271/54.  
XX  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
PT gene expression, particularly useful for treating hyperproliferative or  
PT neurological disorders for example, mental retardation, or  
PT thrombocytopaenia.  
XX  
XX Claim 3; Page 75; 104pp; English.  
XX  
XX The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
CC treating an animal having a disease or condition associated with PCTAIRE  
CC protein kinase 1, particularly a hyperproliferative disease or a  
CC neurological disease. These diseases include thrombocytopaenia, mental  
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
CC particularly useful for inhibiting the expression of PCTAIRE protein  
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
CC or as research reagents or kits. The present sequence is an antisense  
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
CC sequence is used to illustrate the method of the invention  
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Best Local Similarity 100.0%; Pred.No. 53;  
Query Match 1.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred.No. 53;



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CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 3 A; 6 C; 2 G; 9 T; 0 U; 0 Other;

Query Match      1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 127 GATCGATGAGAGATCA 146
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RESULT 52
AAL61712/c
ID AAL61712 standard; DNA; 20 BP.
XX
AC AAL61712;
DT 22-SEP-2003 (first entry)
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204149.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
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OS Homo sapiens.
OS Synthetic.
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FT methylcytidines"
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PN WO2003049691-A2.
XX
PD 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.

```

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XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopaenia.
XX Claim 3; Page 74; 104pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopaenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;

Query Match      1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 181 GGCATAGACAAGACCAATGG 200
DB 20 GGCATAGACAAGACCAATGG 1
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RESULT 53
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ID AAL61736 standard; DNA; 20 BP.
XX
AC AAL61736;
DT 22-SEP-2003 (first entry)
DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204173.
XX
KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
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OS Homo sapiens.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_base 1..20
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PD 19-JUN-2003.

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PF 06-DEC-2002; 2002WO-US039138.
XX
PR 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
PA
PI Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
DR
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopoenia.
XX
XX Example 15; Page 74; 104pp; English.
PS
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopoenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 4 A; 3 C; 5 G; 8 T; 0 U; 0 Other;
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Qy 614 CCTACATTAAAGCTGGACAAA 633
Db 20 CCTACATTAAAGCTGGACAAA 1
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XX AAL61747;
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XX 22-SEP-2003 (first entry)
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XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204184.
DE
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XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopoenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
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OS Synthetic.
XX
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XX WO2003049691-A2.
PN
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XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Freier SM, Roach MP;
PI
XX
XX WPI; 2003-577271/54.
DR
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopoenia.
XX
XX Claim 3; Page 74; 104pp; English.
PS
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopoenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
XX Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;
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Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1207 TTTCCGGGCTCCACGGTGA 1226
Db 20 TTTCCGGGCTCCACGGTGA 1
RESULT 55
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XX AAL61761;
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XX 22-SEP-2003 (first entry)
DT
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204198.
DE
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XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopoenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
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XX WO2003049691-A2.
XX 19-JUN-2003.
XX 06-DEC-2002; 2002WO-US039138.
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX Claim 3; Page 75; 104pp; English.
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
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XX RESULT 56
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XX ID AAL61710 standard; DNA; 20 BP.
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XX AC AAL61710;
XX
XX DT 22-SEP-2003 (first entry)
XX
XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204147.
XX
XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;

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KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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XX WO2003049691-A2.
XX 19-JUN-2003.
XX 06-DEC-2002; 2002WO-US039138.
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
XX gene expression, particularly useful for treating hyperproliferative or
XX neurological disorders for example, mental retardation, or
XX thrombocytopenia.
XX Claim 3; Page 74; 104pp; English.
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XX for modulating the expression of PCTAIRE protein kinase 1 (also known as
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
XX treating an animal having a disease or condition associated with PCTAIRE
XX protein kinase 1, particularly a hyperproliferative disease or a
XX neurological disease. These diseases include thrombocytopenia, mental
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is
XX particularly useful for inhibiting the expression of PCTAIRE protein
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
XX or as research reagents or kits. The present sequence is an antisense
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
XX sequence is used to illustrate the method of the invention
XX
XX Query Match 1.1%; Score 20; DB 1; Length 20;
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XX |||||
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XX RESULT 57
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XX ID AAL61742 standard; DNA; 20 BP.

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CC or as research reagents or kits. The present sequence is an antisense  
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 DB 20 GCACGCTAAGGATGGACAG 1  
 RESULT 59  
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 DT 22-SEP-2003 (first entry)  
 XX  
 DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204136.  
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 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
 KW antisense; ss.  
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 OS Synthetic.  
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 FT /mod\_base= OTHER  
 FT /note= "2'methoxyethyl nucleotides"  
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 PD 19-JUN-2003.  
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 PF 06-DEC-2002; 2002WO-US039138.  
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 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Freier SM, Roach MP;  
 XX  
 DR WPI; 2003-577271/54.  
 XX  
 PT New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
 PT gene expression, particularly useful for treating hyperproliferative or  
 PT neurological disorders for example, mental retardation, or  
 PT thrombocytopaenia.  
 XX  
 PS Claim 3; Page 73; 104pp; English.  
 CC The invention relates to antisense compounds, compositions and methods  
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as

CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
 CC treating an animal having a disease or condition associated with PCTAIRE  
 CC protein kinase 1, particularly a hyperproliferative disease or a  
 CC neurological disease. These diseases include thrombocytopaenia, mental  
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
 CC particularly useful for inhibiting the expression of PCTAIRE protein  
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
 CC or as research reagents or kits. The present sequence is an antisense  
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
 CC sequence is used to illustrate the method of the invention  
 XX  
 SQ Sequence 20 BP; 2 A; 8 C; 2 G; 8 T; 0 U; 0 Other;  
 Query Match 1.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 53;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 14 AAGGATGGACAGGATGCAG 33  
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 DB 20 AAGGATGGACAGGATGCAG 1  
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 XX  
 AC AAL61709;  
 XX  
 DT 22-SEP-2003 (first entry)  
 XX  
 DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204146.  
 XX  
 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
 KW antisense; ss.  
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 OS Synthetic.  
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 FT /note= "Phosphorothioate backbone; All cytidines are 5-  
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 FT /note= "2'methoxyethyl nucleotides"  
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 FT /\*tag= c  
 FT /mod\_base= OTHER  
 FT /note= "2'methoxyethyl nucleotides"  
 XX  
 PN WO2003049691-A2.  
 PD 19-JUN-2003.  
 XX  
 PF 06-DEC-2002; 2002WO-US039138.  
 XX  
 PR 07-DEC-2001; 2001US-00017621.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Freier SM, Roach MP;  
 XX  
 DR WPI; 2003-577271/54.  
 XX



PT New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
PT gene expression, particularly useful for treating hyperproliferative or  
PT neurological disorders for example, mental retardation, or  
PT thrombocytopenia.

XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
CC treating an animal having a disease or condition associated with PCTAIRE  
CC protein kinase 1, particularly a hyperproliferative disease or a  
CC neurological disease. These diseases include thrombocytopenia, mental  
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
CC particularly useful for inhibiting the expression of PCTAIRE protein  
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
CC or as research reagents or kits. The present sequence is an antisense  
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This  
CC sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 53;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 149 GGCAGCTGTCATGACACTC 168  
|||||  
DB 20 GGCAGCTGTCATGACACTC 1

RESULT 61  
AAL61721/c  
ID AAL61721 standard; DNA; 20 BP.

XX AAL61721;  
XX 22-SEP-2003 (first entry)

XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204158.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
XX hyperproliferative disease; neurological disease; thrombocytopenia;  
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
XX antisense; ss.

XX Homo sapiens.  
OS Synthetic.

XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidines are 5-  
FT methylcytidines"  
FT modified\_base 1..5  
FT /tag= b  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
FT modified\_base 16..20  
FT /tag= c  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"

XX WO2003049691-A2.  
XX 19-JUN-2003.  
XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.  
XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;  
XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
XX gene expression, particularly useful for treating hyperproliferative or  
XX neurological disorders for example, mental retardation, or  
XX thrombocytopenia.

XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
CC treating an animal having a disease or condition associated with PCTAIRE  
CC protein kinase 1, particularly a hyperproliferative disease or a  
CC neurological disease. These diseases include thrombocytopenia, mental  
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
CC particularly useful for inhibiting the expression of PCTAIRE protein  
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
CC or as research reagents or kits. The present sequence is an antisense  
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This  
CC sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 6 A; 9 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 53;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 343 TTGAAGATGGGTCGTGATGG 362  
|||||  
DB 20 TTGAAGATGGGTCGTGATGG 1

RESULT 62  
AAL61735/c  
ID AAL61735 standard; DNA; 20 BP.

XX AAL61735;  
XX 22-SEP-2003 (first entry)

XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204172.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
XX hyperproliferative disease; neurological disease; thrombocytopenia;  
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
XX antisense; ss.

XX Homo sapiens.  
OS Synthetic.

XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidines are 5-  
FT methylcytidines"  
FT modified\_base 1..5  
FT /tag= b  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
FT modified\_base 16..20



KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
XX antisense; ss.  
OS Homo sapiens.  
XX Synthetic.  
XX Location/Qualifiers  
FH modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidines are 5-  
FT methylethylenes"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
XX WO2003049691-A2.  
XX 19-JUN-2003.  
XX 06-DEC-2002; 2002WO-US039138.  
XX 07-DEC-2001; 2001US-00017621.  
XX (ISIS-) ISIS PHARM INC.  
XX Freier SM, Roach MP;  
XX WPI; 2003-577271/54.  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
XX gene expression, particularly useful for treating hyperproliferative or  
XX neurological disorders for example, mental retardation, or  
XX thrombocytopenia.  
XX Claim 3; Page 75; 104pp; English.  
XX The invention relates to antisense compounds, compositions and methods  
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as  
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
XX treating an animal having a disease or condition associated with PCTAIRE  
XX protein kinase 1, particularly a hyperproliferative disease or a  
XX neurological disease. These diseases include thrombocytopenia, mental  
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is  
XX particularly useful for inhibiting the expression of PCTAIRE protein  
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
XX or as research reagents or kits. The present sequence is an antisense  
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This  
XX sequence is used to illustrate the method of the invention  
SQ Sequence 20 BP; 7 A; 1 C; 7 G; 5 T; 0 U; 0 Other;  
Query Match 1.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 53;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1490 TTCCTGACACTACTCCATA 1509  
Db ||||||||||||||||||||  
20 TTCCTGACACTACTCCATA 1

RESULT 65  
AAL61730/c  
ID AAL61730 standard; DNA; 20 BP.  
XX

AC AAL61730;  
XX 22-SEP-2003 (first entry)  
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204167.  
XX  
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW hyperproliferative disease; neurological disease; thrombocytopenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.  
XX Homo sapiens.  
OS Synthetic.  
XX Location/Qualifiers  
FH modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidines are 5-  
FT methylethylenes"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
XX WO2003049691-A2.  
XX 19-JUN-2003.  
XX 06-DEC-2002; 2002WO-US039138.  
XX 07-DEC-2001; 2001US-00017621.  
XX (ISIS-) ISIS PHARM INC.  
XX Freier SM, Roach MP;  
XX WPI; 2003-577271/54.  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
XX gene expression, particularly useful for treating hyperproliferative or  
XX neurological disorders for example, mental retardation, or  
XX thrombocytopenia.  
XX Claim 3; Page 74; 104pp; English.  
XX The invention relates to antisense compounds, compositions and methods  
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as  
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
XX treating an animal having a disease or condition associated with PCTAIRE  
XX protein kinase 1, particularly a hyperproliferative disease or a  
XX neurological disease. These diseases include thrombocytopenia, mental  
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is  
XX particularly useful for inhibiting the expression of PCTAIRE protein  
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
XX or as research reagents or kits. The present sequence is an antisense  
XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This  
XX sequence is used to illustrate the method of the invention  
SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 1.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 53;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 493 ATCCGGCTGCTGAGGCTA 512  
DB 20 ATCCGGCTGCTGAGGCTA 1

## RESULT 66

AAL61731/c  
ID AAL61731 standard; DNA; 20 BP.

XX AC AAL61731;  
XX DT 22-SEP-2003 (first entry)

XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204168.

XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
XX KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
XX KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
XX KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
XX KW PTK1; crk5; incontinencia pigmenti; phosphorothioate backbone;  
XX KW antisense; ss.

XX OS Homo sapiens.

XX OS Synthetic.

XX FH Key Location/Qualifiers

XX FT modified\_base 1..20

XX FT /tag= a

XX FT /mod\_base= OTHER

XX FT /note= "Phosphorothioate backbone; All cytidines are 5-

XX FT methylcytidines"

XX FT modified\_base 1..5

XX FT /tag= b

XX FT /mod\_base= OTHER

XX FT /note= "2'methoxyethyl nucleotides"

XX FT /tag= c

XX FT /mod\_base= OTHER

XX FT /note= "2'methoxyethyl nucleotides"

XX PN WO2003049691-A2.

XX PD 19-JUN-2003.

XX PF 06-DEC-2002; 2002WO-US039138.

XX PR 07-DEC-2001; 2001US-00017621.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Freier SM, Roach MP;

XX DR WPI; 2003-577271/54.

XX DE New antisense oligonucleotides for modulating PCTAIRE protein kinase 1

XX PT gene expression, particularly useful for treating hyperproliferative or

XX PT neurological disorders for example, mental retardation, or

XX PT thrombocytopenia.

XX PS Claim 3; Page 74; 104pp; English.

XX CC The invention relates to antisense compounds, compositions and methods

XX CC for modulating the expression of PCTAIRE protein kinase 1 (also known as

XX CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for

XX CC treating an animal having a disease or condition associated with PCTAIRE

XX CC protein kinase 1, particularly a hyperproliferative disease or a

XX CC neurological disease. These diseases include thrombocytopaenia, mental

XX CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia

XX CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth

XX CC disease, or incontinencia pigmenti. The antisense oligonucleotide is

XX CC particularly useful for inhibiting the expression of PCTAIRE protein

XX CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,

XX CC or as research reagents or kits. The present sequence is an antisense

CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
CC sequence is used to illustrate the method of the invention  
XX SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 53;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 499 CTGCTGAGGCTACCTGGA 518

DB 20 CTGCTGAGGCTACCTGGA 1

## RESULT 67

AAL61751/c

ID AAL61751 standard; DNA; 20 BP.

XX AC AAL61751;

XX DT 22-SEP-2003 (first entry)

XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204188.

XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
XX KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
XX KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
XX KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
XX KW PTK1; crk5; incontinencia pigmenti; phosphorothioate backbone;  
XX KW antisense; ss.

XX OS Homo sapiens.

XX OS Synthetic.

XX FH Key Location/Qualifiers

XX FT modified\_base 1..20

XX FT /tag= a

XX FT /mod\_base= OTHER

XX FT /note= "Phosphorothioate backbone; All cytidines are 5-

XX FT methylcytidines"

XX FT modified\_base 1..5

XX FT /tag= b

XX FT /mod\_base= OTHER

XX FT /note= "2'methoxyethyl nucleotides"

XX FT /tag= c

XX FT /mod\_base= OTHER

XX FT /note= "2'methoxyethyl nucleotides"

XX PN WO2003049691-A2.

XX PD 19-JUN-2003.

XX PF 06-DEC-2002; 2002WO-US039138.

XX PR 07-DEC-2001; 2001US-00017621.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Freier SM, Roach MP;

XX DR WPI; 2003-577271/54.

XX DE New antisense oligonucleotides for modulating PCTAIRE protein kinase 1

XX PT gene expression, particularly useful for treating hyperproliferative or

XX PT neurological disorders for example, mental retardation, or

XX PT thrombocytopenia.

XX PS Claim 3; Page 74; 104pp; English.

XX CC The invention relates to antisense compounds, compositions and methods

XX CC for modulating the expression of PCTAIRE protein kinase 1 (also known as

XX CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for

XX CC treating an animal having a disease or condition associated with PCTAIRE

XX CC protein kinase 1, particularly a hyperproliferative disease or a

XX CC neurological disease. These diseases include thrombocytopaenia, mental

XX CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia

XX CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth

XX CC disease, or incontinencia pigmenti. The antisense oligonucleotide is

XX CC particularly useful for inhibiting the expression of PCTAIRE protein

XX CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,

XX CC or as research reagents or kits. The present sequence is an antisense

CC treating an animal having a disease or condition associated with PCTAIRE  
 CC protein kinase 1, particularly a hyperproliferative disease or a  
 CC neurological disease. These diseases include thrombocytopaenia, mental  
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
 CC particularly useful for inhibiting the expression of PCTAIRE protein  
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
 CC or as research reagents or kits. The present sequence is an antisense  
 CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This  
 CC sequence is used to illustrate the method of the invention  
 XX  
 XX Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;  
 SQ

Query Match 1.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 53;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1284 AGGCATCCTGTCACACGAGG 1303  
 Db 20 AGGCATCCTGTCACACGAGG 1

RESULT 68  
 AAL61752/c  
 ID AAL61752 standard; DNA; 20 BP.  
 XX  
 AC AAL61752;  
 XX  
 DT 22-SEP-2003 (first entry)  
 XX  
 DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204189.  
 XX  
 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
 KW antisense; ss.  
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 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "Phosphorothioate backbone; All cytidines are 5-  
 FT methycytidines"  
 FT modified\_base 1..5  
 FT /tag= b  
 FT /mod\_base= OTHER  
 FT /note= "2'methoxyethyl nucleotides"  
 FT modified\_base 16..20  
 FT /tag= c  
 FT /mod\_base= OTHER  
 FT /note= "2'methoxyethyl nucleotides"  
 XX  
 FN WO2003049691-A2.  
 XX  
 XX 19-JUN-2003.  
 PD  
 XX 06-DEC-2002; 2002WO-US039138.  
 FF  
 XX 07-DEC-2001; 2001US-00017621.  
 PR  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Freier SM, Roach MP;  
 DI  
 XX WPI; 2003-577271/54.  
 DR  
 XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
 XX

PT gene expression, particularly useful for treating hyperproliferative or  
 PT neurological disorders for example, mental retardation, or  
 XX thrombocytopaenia.  
 XX Claim 3; Page 74; 104pp; English.  
 XX  
 CC The invention relates to antisense compounds, compositions and methods  
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
 CC treating an animal having a disease or condition associated with PCTAIRE  
 CC protein kinase 1, particularly a hyperproliferative disease or a  
 CC neurological disease. These diseases include thrombocytopaenia, mental  
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
 CC particularly useful for inhibiting the expression of PCTAIRE protein  
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
 CC or as research reagents or kits. The present sequence is an antisense  
 CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This  
 CC sequence is used to illustrate the method of the invention  
 XX  
 XX Sequence 20 BP; 1 A; 6 C; 8 G; 5 T; 0 U; 0 Other;  
 SQ

Query Match 1.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 53;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1326 CAAGTACCGAGCGGAGGCC 1345  
 Db 20 CAAGTACCGAGCGGAGGCC 1

RESULT 69  
 AAL61775/c  
 ID AAL61775 standard; DNA; 20 BP.  
 XX  
 AC AAL61775;  
 XX  
 DT 22-SEP-2003 (first entry)  
 XX  
 DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204212.  
 XX  
 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
 KW antisense; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "Phosphorothioate backbone; All cytidines are 5-  
 FT methycytidines"  
 FT modified\_base 1..5  
 FT /tag= b  
 FT /mod\_base= OTHER  
 FT /note= "2'methoxyethyl nucleotides"  
 FT modified\_base 16..20  
 FT /tag= c  
 FT /mod\_base= OTHER  
 FT /note= "2'methoxyethyl nucleotides"  
 XX  
 FN WO2003049691-A2.  
 XX  
 XX 19-JUN-2003.  
 PD  
 XX 06-DEC-2002; 2002WO-US039138.  
 PF  
 XX

```

PR 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
DR
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 75; 104pp; English.
PS
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1719 GAGCCATGTTACCTGCCCA 1738
DB 20 GAGCCATGTTACCTGCCCA 1
RESULT 70
AAL61708/c
ID AAL61708 standard; DNA; 20 BP.
XX
XX AAL61708;
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204145.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "2'-methoxyethyl nucleotides"
XX modified_base 16..20
XX /tag= c

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FT /mod_base= OTHER
FT /note= "2'-methoxyethyl nucleotides"
XX
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
XX Claim 3; Page 74; 104pp; English.
PS
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 143 TCAAACGGCAGCTGTCATG 162
DB 20 TCAAACGGCAGCTGTCATG 1
RESULT 71
AAL61717/c
ID AAL61717 standard; DNA; 20 BP.
XX
XX AAL61717;
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204154.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a

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FT FT /mod_base= OTHER
FT KW /note= "Phosphorothioate backbone; All cytidines are 5-
FT FT methylcytidines"
FT OS 1..5
FT XX /*tag= b
FT FT /mod_base= OTHER
FT FT /note= "2'methoxyethyl nucleotides"
FT FT 16..20
FT FT /*tag= c
FT FT /mod_base= OTHER
FT FT /note= "2'methoxyethyl nucleotides"
XX XX
XX FN WO2003049691-A2.
XX XX 19-JUN-2003.
XX PD
XX XX
XX XX 06-DEC-2002; 2002WO-US039138.
XX PF
XX XX 07-DEC-2001; 2001US-00017621.
XX PR
XX XX (ISIS-) ISIS PHARM INC.
XX PA
XX PI Freier SM, Roach MP;
XX XX WPI; 2003-577271/54.
XX DR
XX XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX PS Claim 3; Page 74; 104pp; English.
XX XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, cystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX SQ Sequence 20 BP; 3 A; 5 C; 9 G; 3 T; 0 U; 0 Other;
Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 303 GGGCCCACTCAGCTTGAC 322
DB 20 GGGCCCACTCAGCTTGAC 1
|||||
RESULT 72
AAL61722/c
ID AAL61722 standard; DNA; 20 BP.
XX AC AAL61722;
XX XX 22-SEP-2003 (first entry)
XX DT
XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204159.
XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
```

```
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
antisense; ss.
XX Homo sapiens.
OS Synthetic.
XX Key Location/Qualifiers
FT modified_base 1..20
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT FT methylcytidines"
FT FT 1..5
FT FT /*tag= b
FT FT /mod_base= OTHER
FT FT /note= "2'methoxyethyl nucleotides"
FT FT 16..20
FT FT /*tag= c
FT FT /mod_base= OTHER
FT FT /note= "2'methoxyethyl nucleotides"
XX XX WO2003049691-A2.
XX FN 19-JUN-2003.
XX PD
XX XX 06-DEC-2002; 2002WO-US039138.
XX PF
XX XX 07-DEC-2001; 2001US-00017621.
XX PR
XX XX (ISIS-) ISIS PHARM INC.
XX PA
XX PI Freier SM, Roach MP;
XX XX WPI; 2003-577271/54.
XX DR
XX XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX PS Claim 3; Page 74; 104pp; English.
XX XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX SQ Sequence 20 BP; 3 A; 5 C; 8 G; 4 T; 0 U; 0 Other;
```

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Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 370 GACCAGGCTTCAGCCAGTC 389
DB 20 GACCAGGCTTCAGCCAGTC 1
|||||
RESULT 73
AAL61725/c
ID AAL61725 standard; DNA; 20 BP.
XX AC AAL61725;
```

XX DT 22-SEP-2003 (first entry)

XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204162.

XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone; antisense; ss.

XX OS Homo sapiens.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"

FT modified\_base 1..5

FT /\*tag= b

FT /mod\_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

FT modified\_base 16..20

FT /\*tag= c

FT /mod\_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

PN WO2003049691-A2.

XX 19-JUN-2003.

XX PF 06-DEC-2002; 2002WO-US039138.

XX PR 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX PI Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia.

XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention

SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 11%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 53;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 415 AGAGTGGGTATGGCAACCA 434

Db 20 AGAGTGGGTATGGCAACCA 1

RESULT 74

AAL61744/c

ID AAL61744 standard; DNA; 20 BP.

XX AAL61744;

XX 22-SEP-2003 (first entry)

XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204181.

XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone; antisense; ss.

XX OS Homo sapiens.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"

FT modified\_base 1..5

FT /\*tag= b

FT /mod\_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

FT modified\_base 16..20

FT /\*tag= c

FT /mod\_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

PN WO2003049691-A2.

XX 19-JUN-2003.

XX PF 06-DEC-2002; 2002WO-US039138.

XX PR 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX PI Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia.

XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This



CC sequence is used to illustrate the method of the invention  
XX  
SQ Sequence 20 BP; 3 A; 5 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 53;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 966 GGTGCTACACCGAGACTCA 985  
|||||  
DB 20 GGTGCTACACCGAGACTCA 1

RESULT 75  
AAL61762/c  
ID AAL61762 standard; DNA; 20 BP.

XX AAL61762;

DT 22-SEP-2003 (first entry)

XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204199.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.

XX Homo sapiens.  
OS Synthetic.

XX Key Location/Qualifiers

FT modified\_base 1..20  
FT /tag= a  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate backbone; All cytidines are 5-methylcytidines"

FT modified\_base 1..5  
FT /tag= b

FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"

FT modified\_base 16..20  
FT /tag= c  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"

XX WO2003049691-A2.

XX 19-JUN-2003.

XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
PT gene expression, particularly useful for treating hyperproliferative or  
PT neurological disorders for example, mental retardation, or  
PT thrombocytopaenia.

XX Claim 3; Page 75; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
CC treating an animal having a disease or condition associated with PCTAIRE

CC protein kinase 1, particularly a hyperproliferative disease or a  
CC neurological disease. These diseases include thrombocytopaenia, mental  
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
CC particularly useful for inhibiting the expression of PCTAIRE protein  
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
CC or as research reagents or kits. The present sequence is an antisense  
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
CC sequence is used to illustrate the method of the invention

XX SQ Sequence 20 BP; 4 A; 1 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 53;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1480 ATCCACAACTTCCTGACAC 1499  
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DB 20 ATCCACAACTTCCTGACAC 1

RESULT 76

AAL61703/c

ID AAL61703 standard; DNA; 20 BP.

XX AAL61703;

XX 22-SEP-2003 (first entry)

XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204140.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
KW antisense; ss.

XX Homo sapiens.  
OS Synthetic.

XX Key Location/Qualifiers

FT modified\_base 1..20

FT /tag= a

FT /mod\_base= OTHER  
FT /note= "phosphorothioate backbone; All cytidines are 5-methylcytidines"

FT modified\_base 1..5

FT /tag= b

FT /mod\_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

FT modified\_base 16..20

FT /tag= c

FT /mod\_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

XX WO2003049691-A2.

XX 19-JUN-2003.

XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
PT gene expression, particularly useful for treating hyperproliferative or  
PT gene expression, particularly useful for treating hyperproliferative or

PT neurological disorders for example, mental retardation, or  
 PT thrombocytopenia.

XX Example 15; Page 73; 104pp; English.

CC The invention relates to antisense compounds, compositions and methods  
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
 CC treating an animal having a disease or condition associated with PCTAIRE  
 CC protein kinase 1, particularly a hyperproliferative disease or a  
 CC neurological disease. These diseases include thrombocytopenia, mental  
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
 CC particularly useful for inhibiting the expression of PCTAIRE protein  
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
 CC or as research reagents or kits. The present sequence is an antisense  
 CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This  
 CC sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 53;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 56 TGTGACTGCTGAACCCAGG 75  
 |||||  
 Db 20 TGTGACTGCTGAACCCAGG 1

RESULT 77

AAL61711/c  
 ID AAL61711 standard; DNA; 20 BP.

XX AAL61711;

XX 22-SEP-2003 (first entry)

XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204148.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
 KW hyperproliferative disease; neurological disease; thrombocytopenia;  
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
 KW antisense; ss.

XX Homo sapiens.  
 OS Synthetic.

XX Key Location/Qualifiers

FT modified\_base 1..20  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "Phosphorothioate backbone; All cytidines are 5-  
 FT methylcytidines"  
 FT modified\_base 1..5  
 FT /tag= b  
 FT /mod\_base= OTHER  
 FT /note= "2-methoxyethyl nucleotides"  
 FT modified\_base 16..20  
 FT /tag= c  
 FT /mod\_base= OTHER  
 FT /note= "2-methoxyethyl nucleotides"

XX WO2003049691-A2.

XX 19-JUN-2003.

XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
 PT gene expression, particularly useful for treating hyperproliferative or  
 PT neurological disorders for example, mental retardation, or  
 PT thrombocytopenia.

XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods  
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
 CC treating an animal having a disease or condition associated with PCTAIRE  
 CC protein kinase 1, particularly a hyperproliferative disease or a  
 CC neurological disease. These diseases include thrombocytopenia, mental  
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
 CC particularly useful for inhibiting the expression of PCTAIRE protein  
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
 CC or as research reagents or kits. The present sequence is an antisense  
 CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This  
 CC sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 2 A; 9 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 53;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 169 CGAGGTGCGCGAGGCATAGA 188  
 |||||  
 Db 20 CGAGGTGCGCGAGGCATAGA 1

RESULT 78

AAL61716/c

ID AAL61716 standard; DNA; 20 BP.

XX AAL61716;

XX 22-SEP-2003 (first entry)

XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204153.

XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
 KW hyperproliferative disease; neurological disease; thrombocytopenia;  
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
 KW antisense; ss.

XX Homo sapiens.  
 OS Synthetic.

XX Key Location/Qualifiers

FT modified\_base 1..20  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "Phosphorothioate backbone; All cytidines are 5-  
 FT methylcytidines"  
 FT modified\_base 1..5  
 FT /tag= b  
 FT /mod\_base= OTHER  
 FT /note= "2-methoxyethyl nucleotides"  
 FT modified\_base 16..20  
 FT /tag= c  
 FT /mod\_base= OTHER

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FT /note= "2'methoxyethyl nucleotides"
XX
PN WO2003049691-A2.
XX
PD 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
PS Claim 3; Page 74; 104pp; English.
XX
CC The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 3 A; 5 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 299 CACGGGGCCACTCAGCTCT 318
DB 20 CACGGGGCCACTCAGCTCT 1

RESULT 79
AAL61719/c
ID AAL61719 standard; DNA; 20 BP.
XX
AC AAL61719;
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204156.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
XX antisense; ss.
XX
XX Homo sapiens.
CS Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER

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FT /note= "phosphorothioate backbone; All cytidines are 5-
FT methycytidines"
FT 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
XX WO2003049691-A2.
XX
XX 19-JUN-2003.
XX
XX 06-DEC-2002; 2002WO-US039138.
XX
XX 07-DEC-2001; 2001US-00017621.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Roach MP;
XX
XX WPI; 2003-577271/54.
XX
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX
PS Claim 3; Page 74; 104pp; English.
XX
CC The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 331 GTGCACGAGGACTTGAAGAT 350
DB 20 GTGCACGAGGACTTGAAGAT 1

RESULT 80
AAL61769/c
ID AAL61769 standard; DNA; 20 BP.
XX
AC AAL61769;
XX
XX 22-SEP-2003 (first entry)
XX
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204206.
XX
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;

```

KW antisense; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
XX  
FN WO2003049691-A2.  
XX  
XX 19-JUN-2003.  
XX  
XX 06-DEC-2002; 2002WO-US039138.  
XX  
XX 07-DEC-2001; 2001US-00017621.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Freier SM, Roach MP;  
XX  
XX WPI; 2003-577271/54.  
XX  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
XX Gene expression, particularly useful for treating hyperproliferative or  
XX neurological disorders for example, mental retardation, or  
XX thrombocytopenia.  
XX  
XX Claim 3; Page 75; 104pp; English.  
XX  
XX The invention relates to antisense compounds, compositions and methods  
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as  
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
XX treating an animal having a disease or condition associated with PCTAIRE  
XX protein kinase 1, particularly a hyperproliferative disease or a  
XX neurological disease. These diseases include thrombocytopenia, mental  
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is  
XX particularly useful for inhibiting the expression of PCTAIRE protein  
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
XX or as research reagents or kits. The present sequence is an antisense  
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
XX sequence is used to illustrate the method of the invention  
XX  
XX Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;  
XX  
XX Query Match 1.1%; Score 20; DB 1; Length 20;  
XX Best Local Similarity 100.0%; Pred. No. 53;  
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1563 GATGCTGACTCAGGCAGGC 1582  
DB 20 GATGCTGACTCAGGCAGGC 1  
RESULT 81  
AAL61774/c  
ID AAL61774 standard; DNA; 20 BP.  
XX  
AC AAL61774;  
XX

DT 22-SEP-2003 (first entry)  
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204211.  
XX  
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
XX hyperproliferative disease; neurological disease; thrombocytopenia;  
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
XX mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
XX PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
XX antisense; ss.  
XX  
XX Homo sapiens.  
XX Synthetic.  
XX  
XX Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
XX  
XX WO2003049691-A2.  
XX  
XX 19-JUN-2003.  
XX  
XX 06-DEC-2002; 2002WO-US039138.  
XX  
XX 07-DEC-2001; 2001US-00017621.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Freier SM, Roach MP;  
XX  
XX WPI; 2003-577271/54.  
XX  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
XX gene expression, particularly useful for treating hyperproliferative or  
XX neurological disorders for example, mental retardation, or  
XX thrombocytopenia.  
XX  
XX Claim 3; Page 75; 104pp; English.  
XX  
XX The invention relates to antisense compounds, compositions and methods  
XX for modulating the expression of PCTAIRE protein kinase 1 (also known as  
XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
XX treating an animal having a disease or condition associated with PCTAIRE  
XX protein kinase 1, particularly a hyperproliferative disease or a  
XX neurological disease. These diseases include thrombocytopenia, mental  
XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
XX disease, or incontinentia pigmenti. The antisense oligonucleotide is  
XX particularly useful for inhibiting the expression of PCTAIRE protein  
XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
XX or as research reagents or kits. The present sequence is an antisense  
XX oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
XX sequence is used to illustrate the method of the invention  
XX  
XX Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;  
XX  
XX Query Match 1.1%; Score 20; DB 1; Length 20;  
XX Best Local Similarity 100.0%; Pred. No. 53;  
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1715 GCTGAGCCCATGTCACCTG 1734  
|||||

Db 20 GCCTGAGCCATGTTCCACTG 1

## RESULT 82

AAL61713/c  
ID AAL61713 standard; DNA; 20 BP.

XX AC AAL61713;  
XX DT 22-SEP-2003 (first entry)  
XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204150.

XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
XX KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
XX KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
XX KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
XX KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
XX KW antisense; ss.

XX OS Homo sapiens.

XX OS Synthetic.

XX PH Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Phosphorothioate backbone; All cytidines are 5-

FT methylcytidines"

FT modified\_base 1..5

FT /\*tag= b

FT /mod\_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

FT modified\_base 16..20

FT /\*tag= c

FT /mod\_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

XX WO2003049691-A2.

XX 19-JUN-2003.

XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1

XX Gene expression, particularly useful for treating hyperproliferative or

XX neurological disorders for example, mental retardation, or

XX thrombocytopenia.

XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods

XX for modulating the expression of PCTAIRE protein kinase 1 (also known as

XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for

XX treating an animal having a disease or condition associated with PCTAIRE

XX protein kinase 1, particularly a hyperproliferative disease or a

XX neurological disease. These diseases include thrombocytopaenia, mental

XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia

XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth

XX disease, or incontinentia pigmenti. The antisense oligonucleotide is

XX particularly useful for inhibiting the expression of PCTAIRE protein

XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,

XX or as research reagents or kits. The present sequence is an antisense

XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This

XX sequence is used to illustrate the method of the invention

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred.No. 53;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 269 CACGTGCTGCTCTCTGGGAA 288

Db 20 CACGTGCTCTCTCTGGGAA 1

## RESULT 83

AAL61738/c

ID AAL61738 standard; DNA; 20 BP.

XX AC AAL61738;

XX DT 22-SEP-2003 (first entry)

XX DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204175.

XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;

XX KW hyperproliferative disease; neurological disease; thrombocytopaenia;

XX KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;

XX KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;

XX KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;

XX KW antisense; ss.

XX OS Homo sapiens.

XX OS Synthetic.

XX PH Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Phosphorothioate backbone; All cytidines are 5-

FT methylcytidines"

FT modified\_base 1..5

FT /\*tag= b

FT /mod\_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

FT modified\_base 16..20

FT /\*tag= c

FT /mod\_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

XX WO2003049691-A2.

XX 19-JUN-2003.

XX 06-DEC-2002; 2002WO-US039138.

XX 07-DEC-2001; 2001US-00017621.

XX (ISIS-) ISIS PHARM INC.

XX Freier SM, Roach MP;

XX WPI; 2003-577271/54.

XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1

XX gene expression, particularly useful for treating hyperproliferative or

XX neurological disorders for example, mental retardation, or

XX thrombocytopaenia.

XX Claim 3; Page 74; 104pp; English.

XX The invention relates to antisense compounds, compositions and methods

XX for modulating the expression of PCTAIRE protein kinase 1 (also known as

XX PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for

XX treating an animal having a disease or condition associated with PCTAIRE

XX protein kinase 1, particularly a hyperproliferative disease or a

XX neurological disease. These diseases include thrombocytopaenia, mental

XX retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia

XX with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth

XX disease, or incontinentia pigmenti. The antisense oligonucleotide is

XX particularly useful for inhibiting the expression of PCTAIRE protein

XX kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,

XX or as research reagents or kits. The present sequence is an antisense

XX oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This

XX sequence is used to illustrate the method of the invention

XX

XX

XX

XX

XX

XX

XX

XX

CC neurological disease. These diseases include thrombocytopaenia, mental  
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
 CC particularly useful for inhibiting the expression of PCTAIRE protein  
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
 CC or as research reagents or kits. The present sequence is an antisense  
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
 CC sequence is used to illustrate the method of the invention

XX  
 SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 53;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 693 TGTGGCACTCAAGGAGATCA 712  
 |||||  
 DB 20 TGTGGCACTCAAGGAGATCA 1

RESULT 84  
 AAL61743/c  
 ID AAL61743 standard; DNA; 20 BP.  
 XX  
 AC AAL61743;  
 DT 22-SEP-2003 (first entry)  
 XX  
 DE Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204180.  
 XX  
 KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;  
 KW hyperproliferative disease; neurological disease; thrombocytopaenia;  
 KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;  
 KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;  
 KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;  
 KW antisense; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.

XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "Phosphorothioate backbone; All cytidines are 5-  
 FT methylcytidines"  
 FT modified\_base 1..5  
 FT /tag= b  
 FT /mod\_base= OTHER  
 FT /note= "2'methoxyethyl nucleotides"  
 FT modified\_base 16..20  
 FT /tag= c  
 FT /mod\_base= OTHER  
 FT /note= "2'methoxyethyl nucleotides"  
 XX  
 PN WO2003049691-A2.  
 XX  
 PD 19-JUN-2003.  
 XX  
 PF 06-DEC-2002; 2002WO-US039138.  
 XX  
 PR 07-DEC-2001; 2001US-00017621.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Freier SM, Roach MP;  
 XX  
 DR WPI; 2003-577271/54.  
 XX  
 CC New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
 PT gene expression, particularly useful for treating hyperproliferative or  
 PT neurological disorders for example, mental retardation, or

PT thrombocytopaenia.  
 XX  
 PS Claim 3; Page 74; 104pp; English.  
 XX  
 CC The invention relates to antisense compounds, compositions and methods  
 CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
 CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
 CC treating an animal having a disease or condition associated with PCTAIRE  
 CC protein kinase 1, particularly a hyperproliferative disease or a  
 CC neurological disease. These diseases include thrombocytopaenia, mental  
 CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
 CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
 CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
 CC particularly useful for inhibiting the expression of PCTAIRE protein  
 CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
 CC or as research reagents or kits. The present sequence is an antisense  
 CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This  
 CC sequence is used to illustrate the method of the invention

XX  
 SQ Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 1.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 53;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 958 CGCAGAGAGTGTCTACACCG 977  
 |||||  
 DB 20 CGCAGAGAGTGTCTACACCG 1

RESULT 85  
 AC151216/c  
 ID AC151216 standard; DNA; 25 BP.  
 XX  
 AC AC151216;  
 XX  
 DT 13-OCT-2003 (first entry)  
 XX  
 DE Human microarray DNA oligonucleotide SEQ ID NO 51207.  
 XX  
 KW EST; ss; probe; expressed sequence tag; microarray; gene expression;  
 KW genetic variation; diallelic marker; polymorphism; human;  
 KW cross-species comparison.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US2003104410-A1.  
 XX  
 PD 05-JUN-2003.  
 XX  
 PF 15-MAR-2002; 2002US-00098263.  
 XX  
 PR 16-MAR-2001; 2001US-0276759P.  
 XX  
 PA (AFFY-) AFFYMETRIX INC.  
 XX  
 PI Mittmann MP;  
 XX  
 DR WPI; 2003-567953/53.  
 XX  
 CC New array of nucleic acid probes, useful for in situ hybridization, in  
 CC Southern, Northern or dot-blot hybridization to identify or detect the  
 CC sequence or specific mutations of any gene.  
 XX  
 PS Claim 1; SEQ ID NO 51207; 9pp; English.  
 XX  
 CC The invention discloses a microarray comprising a plurality of nucleic  
 CC acid probes including one of 2,018,500 fully defined sequences, or its  
 CC perfect match, perfect mismatch, antisense match or antisense mismatch.  
 CC Also disclosed is a method of gene expression analysis. The array is used  
 CC in monitoring gene expression levels by hybridisation to a DNA library,  
 CC in analysis of genetic variation or in hybridisation of tag-labelled  
 CC compounds. The nucleic acid probes are specifically designed for analysis

CC of at least one target sequence. The method of analysis comprises  
 CC hybridising at least one or more nucleic acids to at least two or more  
 CC nucleic acid probes and detecting the hybridisation. The nucleic acid  
 CC probes are attached to a solid support. The analysis comprises monitoring  
 CC gene expression levels, identifying biallelic markers or polymorphisms,  
 CC or family members of a gene and a cross-species comparison. Each of the  
 CC nucleic acids further comprises a tag sequence. The array of nucleic acid  
 CC probes is useful in situ hybridisation, in Southern, Northern or dot-  
 CC blot hybridisation to identify or detect the sequence or specific  
 CC mutations of any gene, in mapping the 5' termini of mRNA molecules by  
 CC primer extensions or in screening cDNA or genomic libraries or subclones  
 CC for additional subclones containing segments of DNA that have been  
 CC isolated and previously sequenced. The sequence presented is one of the  
 CC nucleic acid probes incorporated in the microarray. Note: The sequence  
 CC data for this patent can also be obtained in electronic format directly  
 CC from USPTO at [seqdata.uspto.gov/sequence.html](http://seqdata.uspto.gov/sequence.html)  
 CC  
 XX

SQ Sequence 25 BP; 5 A; 8 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 1.1%; Score 19.2; DB 1; Length 25;  
 Best Local Similarity 87.5%; Pred. No. 99;  
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 686 ACAACCTTGTGGCTACTCAAGGAGA 709  
 |||||  
 Db 25 ACAACCTTGTGGCTACTCAAGGAGA 2

RESULT 86  
 AC151217/c  
 ID AC151217 standard; DNA; 25 BP.  
 XX  
 AC AC151217;  
 DT 13-OCT-2003 (first entry)  
 DE Human microarray DNA oligonucleotide SEQ ID NO 51208.  
 XX  
 KW EST; ss; probe; expressed sequence tag; microarray; gene expression;  
 KW genetic variation; biallelic marker; polymorphism; human;  
 KW cross-species comparison.

OS Homo sapiens.  
 XX  
 FN US2003104410-A1.  
 XX  
 PD 05-JUN-2003.  
 XX  
 PF 15-MAR-2002; 2002US-00098263.  
 XX  
 PR 16-MAR-2001; 2001US-0276759P.  
 XX  
 FA (AFFY-) AFFYMETRIX INC.  
 XX  
 PI Mittmann MP;  
 XX  
 DR WPI; 2003-567953/53.  
 XX  
 PT New array of nucleic acid probes, useful for in situ hybridization, in  
 PT Southern, Northern or dot-blot hybridization to identify or detect the  
 PT sequence or specific mutations of any gene.

PS Claim 1; SEQ ID NO 51208; 9pp; English.  
 XX  
 CC The invention discloses a microarray comprising a plurality of nucleic  
 CC acid probes including one of 2,018,500 fully defined sequences, or its  
 CC perfect match, perfect mismatch, antisense match or antisense mismatch.  
 CC Also disclosed is a method of gene expression analysis. The array is used  
 CC in monitoring gene expression levels by hybridisation to a DNA library,  
 CC in analysis of genetic variation or in hybridisation of tag-labelled  
 CC compounds. The nucleic acid probes are specifically designed for analysis  
 CC of at least one target sequence. The method of analysis comprises  
 CC hybridising at least one or more nucleic acids to at least two or more

CC nucleic acid probes and detecting the hybridisation. The nucleic acid  
 CC probes are attached to a solid support. The analysis comprises monitoring  
 CC gene expression levels, identifying biallelic markers or polymorphisms,  
 CC or family members of a gene and a cross-species comparison. Each of the  
 CC nucleic acids further comprises a tag sequence. The array of nucleic acid  
 CC probes is useful in situ hybridisation, in Southern, Northern or dot-  
 CC blot hybridisation to identify or detect the sequence or specific  
 CC mutations of any gene, in mapping the 5' termini of mRNA molecules by  
 CC primer extensions or in screening cDNA or genomic libraries or subclones  
 CC for additional subclones containing segments of DNA that have been  
 CC isolated and previously sequenced. The sequence presented is one of the  
 CC nucleic acid probes incorporated in the microarray. Note: The sequence  
 CC data for this patent can also be obtained in electronic format directly  
 CC from USPTO at [seqdata.uspto.gov/sequence.html](http://seqdata.uspto.gov/sequence.html)  
 CC  
 XX

SQ Sequence 25 BP; 4 A; 8 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 1.1%; Score 19.2; DB 1; Length 25;  
 Best Local Similarity 87.5%; Pred. No. 99;  
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 686 ACAACCTTGTGGCTACTCAAGGAGA 709  
 |||||  
 Db 25 ACAACCTTGTGGCTACTCAAGGAGA 2

RESULT 87  
 AAZ29517  
 ID AAZ29517 standard; DNA; 29 BP.  
 XX  
 AC AAZ29517;  
 XX  
 DT 14-MAR-2000 (first entry)  
 DE Primer-2 for identification of SA responsive element in ACPRT-L promoter.  
 XX  
 KW Inducible promoter; Thaumatin-like PR-5 related gene; ACPRT-L; primer;  
 KW non-phytoxic inducing agent; Salicylic acid; SA; BTH; environmental;  
 KW developmental; GUS construct; multimerisation; SA responsive element;  
 KW systemic activation; inverse PCR; IPCR; ss.

OS Synthetic.  
 XX  
 FN WO9966057-A2.  
 XX  
 PD 23-DEC-1999.  
 XX  
 PF 21-JUN-1999; 99WO-GB001949.  
 XX  
 PR 19-JUN-1998; 98GB-00013345.  
 XX  
 PA (BIOG-) BIOGEMMA UK LTD.  
 XX  
 PI Draper J, Kenton P, Paul W;  
 XX  
 DR WPI; 2000-106107/09.  
 XX  
 PT Novel promoters used to control the expression of heterologous genes in  
 PT transformed plants.  
 XX  
 PS Example 12; Page 40; 67pp; English.  
 XX

CC The present DNA sequence is a PCR primer-2, used for the identification  
 CC and multimerisation of a salicylic acid, SA/BTH responsive element in the  
 CC ACPRT-L promoter region. This primer is designed to regions of ACPRT-L  
 CC promoter and used along with PCR primer-4 for the construction of GUS  
 CC fusion constructs  
 CC  
 XX

SQ Sequence 29 BP; 10 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 1.1%; Score 19.2; DB 1; Length 29;  
 Best Local Similarity 87.5%; Pred. No. 1-2e+02;  
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

AA Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss  
KW  
XX  
QS Mammalia.

20-02-17066; 20-02-17066

28-001-1999; 9903-0101332F



```
PA (IMMU-) IMMUSOL INC.
XX Robbins JM, Tritz R;
PI WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX that cleave RNA encoding cytokines involved in inflammation, matrix
XX metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 105; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX ophthalmological, vulnary, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX prematurity and retinal detachment, and for treating and preventing
XX scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX scar. AAH57577 to AAH62099 represent sequences used in the
XX exemplification of the present invention
XX
XX Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 79;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1029 GGCTGACTTTGGCCGCGCC 1047
XX | | | | | | | | | | | | | | | | | | | |
XX Db 1 GGCTGACTTTGGCCGCGCC 19
XX
XX RESULT 91
XX AAH58040
XX ID AAH58040 standard; DNA; 19 BP.
XX AC AAH58040;
XX
XX DT 10-SEP-2001 (first entry)
XX
XX DE Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:464.
XX
XX KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulnary;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
XX antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.
XX
XX OS Homo sapiens.
XX OS Synthetic.
XX
XX PN WC200130362-A2.
XX
XX PD 03-MAY-2001.
XX
XX PF 26-OCT-2000; 2000WO-US029500.
XX
XX
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PR 26-OCT-1999; 99US-0161532P.
XX (IMMU-) IMMUSOL INC.
XX Robbins JM, Tritz R;
PI WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX that cleave RNA encoding cytokines involved in inflammation, matrix
XX metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 105; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX ophthalmological, vulnary, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX prematurity and retinal detachment, and for treating and preventing
XX scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX scar. AAH57577 to AAH62099 represent sequences used in the
XX exemplification of the present invention
XX
XX Sequence 19 BP; 1 A; 5 C; 7 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 79;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1028 TGGCTGACTTTGGCGCTGCG 1046
XX | | | | | | | | | | | | | | | | | | | |
XX Db 1 TGGCTGACTTTGGCGCTGCG 19
XX
XX RESULT 92
XX AAL61694
XX ID AAL61694 standard; DNA; 19 BP.
XX AC AAL61694;
XX
XX DT 22-SEP-2003 (first entry)
XX
XX DE Human PCTAIRE protein kinase 1 DNA specific PCR probe.
XX
XX KW Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
XX hyperproliferative disease; neurological disease; thrombocytopaenia;
XX retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
XX mental retardation; Wiskott-Aldrich syndrome; dysonomia; Parkinsonism;
XX PTK1; crk5; incontinentia pigmenti; PCR; probe; ss.
XX
XX OS Homo sapiens.
XX
XX FH Key Location/Qualifiers
XX modified_base 1 /tag= a
XX /mod_base= OTHER
XX /note= "FAM labelled"
XX modified_base 19 /tag= b
XX /mod_base= OTHER
XX /note= "TAMRA labelled"
XX
```

PN WO2003049591-A2.  
XX 19-JUN-2003.  
XX 06-DEC-2002; 2002WO-US039138.  
XX 07-DEC-2001; 2001US-00017621.  
XX (ISIS-) ISIS PHARM INC.  
XX Freier SM, Roach MP;  
XX WPI; 2003-577271/54.  
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1  
PT gene expression, particularly useful for treating hyperproliferative or  
PT neurological disorders for example, mental retardation, or  
PT thrombocytopenia.  
XX  
XX Example 13; Page 71; 104pp; English.  
XX The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as  
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for  
CC treating an animal having a disease or condition associated with PCTAIRE  
CC protein kinase 1, particularly a hyperproliferative disease or a  
CC neurological disease. These diseases include thrombocytopenia, mental  
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia  
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth  
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is  
CC particularly useful for inhibiting the expression of PCTAIRE protein  
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,  
CC or as research reagents or kits. The present sequence is human PCTAIRE  
CC protein kinase 1 DNA specific PCR probe. This sequence is used to  
CC illustrate the method of the invention  
XX  
XX Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;  
SQ  
Query Match 1.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 79;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 111 CCGCGCGATCGCATGGAT 129  
DB 1 CCGCGCGATCGCATGGAT 19  
RESULT 93  
ACI39577  
ID ACI39577 standard; DNA; 25 BP.  
XX ACI39577;  
XX ACI39577;  
XX 13-OCT-2003 (first entry)  
XX Human microarray DNA oligonucleotide SEQ ID NO 39568.  
XX EST; ss; probe; expressed sequence tag; microarray; gene expression;  
KW Genetic variation; biallelic marker; polymorphism; human;  
KW cross-species comparison.  
XX Homo sapiens.  
XX US2003104410-A1.  
XX 05-JUN-2003.  
XX 15-MAR-2002; 2002US-00098263.  
XX 16-MAR-2001; 2001US-0276759P.  
XX (AFFY-) AFFYMETRIX INC.  
XX

PI Mittmann MP;  
XX WPI; 2003-567953/53.  
XX New array of nucleic acid probes, useful for in situ hybridization, in  
PT Southern, Northern or dot-blot hybridization to identify or detect the  
PT sequence or specific mutations of any gene.  
XX Claim 1; SEQ ID NO 39568; 9pp; English.  
XX The invention discloses a microarray comprising a plurality of nucleic  
CC acid probes including one of 2,018,500 fully defined sequences, or its  
CC perfect match, antisense match, antisense match or antisense mismatch.  
CC Also disclosed is a method of gene expression analysis. The array is used  
CC in monitoring gene expression levels by hybridisation to a DNA library,  
CC in analysis of genetic variation or in hybridisation of tag-labelled  
CC compounds. The nucleic acid probes are specifically designed for analysis  
CC of at least one target sequence. The method of analysis comprises  
CC hybridising at least one or more nucleic acids to at least two or more  
CC nucleic acid probes and detecting the hybridisation. The nucleic acid  
CC probes are attached to a solid support. The analysis comprises monitoring  
CC gene expression levels, identifying biallelic markers or polymorphisms,  
CC or family members of a gene and a cross-species comparison. Each of the  
CC nucleic acids further comprises a tag sequence. The array of nucleic acid  
CC probes is useful in in situ hybridisation, in Southern, Northern or dot-  
CC blot hybridisation to identify or detect the sequence or specific  
CC mutations of any gene, in mapping the 5' terminus of mRNA molecules by  
CC primer extensions or in screening cDNA or genomic libraries or subclones  
CC for additional subclones containing segments of DNA that have been  
CC isolated and previously sequenced. The sequence presented is one of the  
CC nucleic acid probes incorporated in the microarray. Note: The sequence  
CC data for this patent can also be obtained in electronic format directly  
CC from USPTO at [seqdata.uspto.gov/sequence.html](http://seqdata.uspto.gov/sequence.html)  
XX  
XX Sequence 25 BP; 7 A; 6 C; 8 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 1.1%; Score 18.8; DB 1; Length 25;  
Best Local Similarity 90.9%; Pred. No. 1.2e+02;  
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1256 TAGGAACCCCACTGAGGAGAC 1277  
DB 4 TAGGCACTCCCACTGAGGAGAC 25  
RESULT 94  
ABT04565  
ID ABT04565 standard; DNA; 28 BP.  
XX ABT04565;  
XX ABT04565;  
XX 25-SEP-2002 (first entry)  
XX Human ALDH3 gene probe SEQ ID NO: 31.  
XX Human; drug metabolism; enzyme; probe; ss.  
XX Homo sapiens.  
XX JP2002142780-A.  
XX 21-MAY-2002.  
XX 28-AUG-2001; 2001JP-00257338.  
XX 04-SEP-2000; 2000JP-00267163.  
XX (SAKA ) OTSUKA SEIYAKU KOGYO KK.  
XX WPI; 2002-552472/59.  
XX Measurement of an enzyme participating to the first phase reaction of  
PT drug metabolism, a probe and a kit for it.  
PT

XX Claim 4; Page 20; 36pp; Japanese.  
PS The present invention relates to probes which can be used for the  
CC measurement of an enzyme. The probes can be used for the measurement of  
CC an enzyme participating to the first phase reaction of drug metabolism.  
CC The present sequence is a probe shown in the invention  
XX  
SQ Sequence 28 BP; 7 A; 9 C; 6 G; 6 T; 0 U; 0 Other;  
Query Match 1.1%; Score 18.8; DB 1; Length 28;  
Best Local Similarity 90.9%; Pred. No. 1.3e+02;  
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 845 AGTACTCTGGACAAGGACCTGAA 866  
DB 7 AGTACTCTGGACAAGGACCTGTA 28  
RESULT 95  
ABN15303  
ID ABN15303 standard; DNA; 25 BP.  
XX AC ABN15303;  
XX  
XX 29-MAY-2002 (first entry)  
XX Human GDMPLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:15295.  
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; heart;  
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
XX skeletal muscle disorder; amplicon; screening; ss.  
OS Homo sapiens.  
XX WO200192524-A2.  
XX  
XX 06-DEC-2001.  
XX  
XX 25-MAY-2001; 2001WO-US016981.  
XX  
XX 26-MAY-2000; 2000US-0207456P.  
XX 21-SEP-2000; 2000US-0234687P.  
XX 27-SEP-2000; 2000US-0236359P.  
XX 04-OCT-2000; 2000GB-00024253.  
XX 30-JAN-2001; 2001WO-US000661.  
XX 30-JAN-2001; 2001WO-US000662.  
XX 30-JAN-2001; 2001WO-US000663.  
XX 30-JAN-2001; 2001WO-US000664.  
XX 30-JAN-2001; 2001WO-US000665.  
XX 30-JAN-2001; 2001WO-US000666.  
XX 30-JAN-2001; 2001WO-US000667.  
XX 30-JAN-2001; 2001WO-US000668.  
XX 30-JAN-2001; 2001WO-US000669.  
XX 30-JAN-2001; 2001WO-US000670.  
XX 05-FEB-2001; 2001US-0266860P.  
XX (AEOM-) AEOMICA INC.  
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX WPI; 2002-179446/23.  
XX  
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
XX or as specific biomolecule capture probes for surface-enhanced laser  
XX desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
XX  
XX Disclosure; SEQ ID NO 15295; 214pp; English.  
XX  
XX The present invention describes a human genome-derived myosin-like  
XX protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
XX 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
XX nucleic acids can be used as probes to detect, characterise and quantify

CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption/ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMPLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX  
SQ Sequence 25 BP; 2 A; 12 C; 4 G; 7 T; 0 U; 0 Other;  
Query Match 1.1%; Score 18.6; DB 1; Length 25;  
Best Local Similarity 84.0%; Pred. No. 1.3e+02;  
Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 555 CCTCAGCGCGCGCTCGTGTGTC 579  
DB 1 CCTCATCTCCGGCTCCATCGTGTGTC 25  
RESULT 96  
ABV82335/c  
ID ABV82335 standard; DNA; 25 BP.  
XX AC ABV82335;  
XX  
XX 03-JAN-2003 (first entry)  
XX  
XX Human HTPL scanning oligonucleotide SEQ ID 3581.  
XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;  
XX human testis expressed Patched like protein; testis; adrenal; liver;  
XX male germ cell development; bone marrow; brain; kidney; lung; placenta;  
XX prostate; skeletal muscle; colon; male infertility; cancer; ss.  
XX Homo sapiens.  
XX EP1229046-A2.  
XX  
XX 07-AUG-2002.  
XX  
XX 28-JAN-2002; 2002EP-00001167.  
XX  
XX 30-JAN-2001; 2001WO-US000663.  
XX 30-JAN-2001; 2001WO-US000664.  
XX 30-JAN-2001; 2001WO-US000665.  
XX 30-JAN-2001; 2001WO-US000667.  
XX 30-JAN-2001; 2001WO-US000668.  
XX 30-JAN-2001; 2001WO-US000669.  
XX 23-MAY-2001; 2001WO-US000670.  
XX 09-OCT-2001; 2001US-00864761.  
XX (AEOM-) AEOMICA INC.  
XX  
XX Zhan J;  
XX WPI; 2002-676592/73.  
XX  
XX Novel isolated human testis expressed Patched like protein (HTPL), useful  
XX for identifying agonist and antagonist and specific binding partners, and  
XX for treating subjects having defects in HTPL.  
XX  
XX Example 2; Page 533; 718pp; English.  
PS

XX The present invention relates to human testis expressed Patched like  
CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL  
CC has two isoforms, with a few single base pair differences between the  
CC two. One of the single base pair changes introduces a premature stop  
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL  
CC shares an overall structure organisation with the Patched protein. The  
CC shared structural features strongly imply that HTPL plays a role similar  
CC to that of Patched, and is a potential tumour suppressor. HTPL is  
CC important in regulating male germ cell development, and the HTPL gene was  
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are  
CC useful for diagnosing a disorder caused by mutation in HTPL, and in  
CC therapy and manufacture of a medicament for treatment or prevention of  
CC such disorder associated with decreased expression or activity of human  
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and  
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,  
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are  
CC clinically useful diagnostic markers and potential therapeutic agents for  
CC male infertility and cancer. The present oligonucleotide was used in an  
CC example from the invention  
XX  
SQ Sequence 25 BP; 7 A; 12 C; 2 G; 4 T; 0 U; 0 Other;  
Query Match 1.1%; Score 18.6; DB 1; Length 25;  
Best Local Similarity 84.0%; Pred. No. 1.3e+02;  
Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 217 GGCTGGATGAGAGTGGTGGTGGT 241  
DB 25 GGCCAGGATGTTAGTGGTGGT 1  
RESULT 97  
ID ABV82336/c  
AC ABV82336;  
DT 03-JAN-2003 (first entry)  
XX Human HTPL scanning oligonucleotide SEQ ID 3582.  
DE Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;  
KW human testis expressed Patched like protein; testis; adrenal; liver;  
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;  
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.  
XX Homo sapiens.  
OS  
XX  
XX EP1229046-A2.  
XX  
XX 07-AUG-2002.  
XX  
XX 28-JAN-2002; 2002EP-00001167.  
XX 30-JAN-2001; 2001WO-US000663.  
XX 30-JAN-2001; 2001WO-US000664.  
XX 30-JAN-2001; 2001WO-US000665.  
XX 30-JAN-2001; 2001WO-US000667.  
XX 30-JAN-2001; 2001WO-US000668.  
XX 30-JAN-2001; 2001WO-US000669.  
XX 23-MAY-2001; 2001US-00864761.  
XX 09-OCT-2001; 2001US-0327898P.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
XX Zhan J;  
XX WPI; 2002-676582/73.  
XX  
XX Novel isolated human testis expressed Patched like protein (HTPL), useful  
PT for identifying agonist and antagonist and specific binding partners, and  
PT for treating subjects having defects in HTPL.

XX Example 2; Page 533; 718pp; English.  
XX The present invention relates to human testis expressed Patched like  
CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL  
CC has two isoforms, with a few single base pair differences between the  
CC two. One of the single base pair changes introduces a premature stop  
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL  
CC shares an overall structure organisation with the Patched protein. The  
CC shared structural features strongly imply that HTPL plays a role similar  
CC to that of Patched, and is a potential tumour suppressor. HTPL is  
CC important in regulating male germ cell development, and the HTPL gene was  
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are  
CC useful for diagnosing a disorder caused by mutation in HTPL, and in  
CC therapy and manufacture of a medicament for treatment or prevention of  
CC such disorder associated with decreased expression or activity of human  
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and  
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, are  
CC clinically useful diagnostic markers and potential therapeutic agents for  
CC male infertility and cancer. The present oligonucleotide was used in an  
CC example from the invention  
XX  
SQ Sequence 25 BP; 7 A; 11 C; 2 G; 5 T; 0 U; 0 Other;  
Query Match 1.1%; Score 18.6; DB 1; Length 25;  
Best Local Similarity 84.0%; Pred. No. 1.3e+02;  
Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 216 AGCCCTGGATGAGAGTGGTGGTGGT 240  
DB 25 AGCCAGGATGTTAGTGGTGGT 1  
RESULT 98  
ID ACK02038/c  
AC ACK02038;  
DT 14-OCT-2003 (first entry)  
XX Human microarray DNA oligonucleotide SEQ ID NO 102019.  
DE  
XX EST; ss; probe; expressed sequence tag; microarray; gene expression;  
KW genetic variation; biallelic marker; polymorphism; human;  
KW cross-species comparison.  
XX  
XX Homo sapiens.  
OS  
XX US2003104410-A1.  
XX  
XX 05-JUN-2003.  
XX  
XX 15-MAR-2002; 2002US-00098263.  
XX 16-MAR-2001; 2001US-0276759P.  
XX (AFFY-) AFFYMETRIX INC.  
XX Mittmann MP;  
XX WPI; 2003-567953/53.  
XX  
XX New array of nucleic acid probes, useful for in situ hybridization, in  
PT Southern, Northern or dot-blot hybridization to identify or detect the  
PT sequence or specific mutations of any gene.  
XX  
XX Claim 1; SEQ ID NO 102019; 9pp; English.  
XX The invention discloses a microarray comprising a plurality of nucleic  
CC acid probes including one of 2,018,500 fully defined sequences, or its  
CC perfect match, perfect mismatch, antisense match or antisense mismatch.

CC Also disclosed is a method of gene expression analysis. The array is used  
CC in monitoring gene expression levels by hybridisation to a DNA library,  
CC in analysis of genetic variation or in hybridisation of tag-labelled  
CC compounds. The nucleic acid probes are specifically designed for analysis  
CC of at least one target sequence. The method of analysis comprises  
CC hybridising at least one or more nucleic acids to at least two or more  
CC nucleic acid probes and detecting the hybridisation. The nucleic acid  
CC probes are attached to a solid support. The analysis comprises monitoring  
CC gene expression levels, identifying biallelic markers or polymorphisms,  
CC or family members of a gene and a cross-species comparison. Each of the  
CC nucleic acids further comprises a tag sequence. The array of nucleic acid  
CC probes is useful in situ hybridisation, in Southern, Northern or dot-  
CC blot hybridisation to identify or detect the sequence or specific  
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by  
CC primer extensions or in screening cDNA or genomic libraries or subclones  
CC for additional subclones containing segments of DNA that have been  
CC isolated and previously sequenced. The sequence presented is one of the  
CC nucleic acid probes incorporated in the microarray. Note: The sequence  
CC data for this patent can also be obtained in electronic format directly  
CC from USPTO at [seqdata.uspto.gov/sequence.html](http://seqdata.uspto.gov/sequence.html)  
XX

SQ Sequence 25 BP; 5 A; 8 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 1.1%; Score 18.6; DB 1; Length 25;  
Best Local Similarity 84.0%; Pred. No. 1.3e+02;  
Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 391 TCGGATGAGGTGGCTCCAGTCTCCAGTCA 415  
DB 25 TAGGATGAGGTGGCAGCTTCAAGTCA 1

RESULT 99  
ABA99028/c  
ID ABA99028 standard; DNA; 27 BP.  
XX  
AC ABA99028;  
XX  
DT 20-MAY-2002 (first entry)  
XX  
DE Human mammary gland enriched chemokine PCR primer #3.  
XX  
KW Human; MEC; mammary gland enriched chemokine; chemokine; tumour; cancer;  
KW cytostatic; antiinflammatory; inflammation; PCR; primer; ss.  
XX  
OS Homo sapiens.

XX US2002009735-A1.  
XX  
PD 24-JAN-2002.  
XX  
PF 21-MAR-2001; 2001US-00813492.  
XX  
PR 23-MAR-2000; 2000US-0191654P.  
XX  
PA (LABO/) LABOW M A.  
PA (MICK/) MICKANIN C S.  
PA (BHAT/) BHATIA U.  
XX  
PI Labow MA, Mickanin CS, Bhatia U;  
XX  
DR WPI; 2002-187776/24.  
XX  
PT Regulating tumor or adverse bodily reaction, involves providing  
PT therapeutic composition comprising a mammary gland chemokine, and  
PT providing the composition to the tumor or to the area of adverse  
PT reaction.

XX Disclosure; Page 5; 11pp; English.  
XX  
CC The sequence represents a human mammary gland enriched chemokine (MEC)  
CC PCR primer. The primer was used in the invention to amplify the coding  
CC region of MECR. The invention relates to a novel method for regulating a

CC tumour or adverse bodily reaction, comprising providing a therapeutic  
CC composition having a mammary gland chemokine polypeptide. The polypeptide  
CC of the invention has cytostatic and antiinflammatory activity. The method  
CC reaction. The invention also provides a method useful for detecting a  
CC tumour using a probe comprising the polynucleotide or an antibody to the  
CC MEC. The adverse bodily reactions include cancer and inflammation  
XX

SQ Sequence 27 BP; 5 A; 7 C; 9 G; 6 T; 0 U; 0 Other;

Query Match 1.1%; Score 18.6; DB 1; Length 27;  
Best Local Similarity 84.0%; Pred. No. 1.4e+02;  
Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 941 GCCTGGCCTACTGCCACCGCAGAA 965  
DB 26 GCCTGGCCTACTGGCACTGACACA 2

RESULT 100  
ABT03768  
ID ABT03768 standard; DNA; 27 BP.  
XX  
AC ABT03768;  
XX  
DT 13-SEP-2002 (first entry)

XX Human SHH gene PCR primer SEQ ID NO: 289.  
XX  
KW Human; cancer; neoplastic disease; tumour specific marker; cytostatic;  
KW transcription factor; PCR; primer; ss.  
XX  
OS Homo sapiens.

XX WO200240716-A2.  
XX  
PD 23-MAY-2002.  
XX  
PF 13-NOV-2001; 2001WO-US043461.  
XX  
PR 16-NOV-2000; 2000US-0249508P.

XX (CEMI-) CEMINES LLC.  
XX  
PI Palm K;  
XX  
DR WPI; 2002-537346/57.

XX  
PT Determining the presence of neoplastic molecular markers, by identifying  
PT the presence of markers in host test sample using array of neoplastic  
PT molecular marker specific reagents and analyzing the array of the  
PT reagents.

XX Example 1; Page 19; 41pp; English.

XX The present invention relates to a method for determining the presence of  
XX neoplastic molecular markers in a host, involving the use of neoplastic  
XX molecular marker specific reagents to detect such markers and analysing  
XX the array of reagents, allowing the identification of the neoplastic  
XX disease present. This can be used to determine the best treatment for  
XX cancer, in particular neural cell, lung and prostate tumours. The  
XX present sequence is a PCR primer useful for detecting the coding  
XX sequences of markers of the invention

SQ Sequence 27 BP; 3 A; 11 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 1.0%; Score 18.2; DB 1; Length 27;  
Best Local Similarity 87.0%; Pred. No. 1.7e+02;  
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 921 CCTGTTCCAGCTGCTCGGTGCC 943  
DB 3 CCTGTTCCAGGTGCACCGTGCC 25

```

RESULT 101
AAV21840/c
ID AAV21840 standard; DNA; 24 BP.
XX
XX
XX AAV21840;
AC
XX
XX
XX 14-JUL-1998 (first entry)
DT
XX
XX Nuclease resistant antisense oligo NBT 55 targeted against parB gene.
DE
XX
XX Nuclease resistant; bacterial infection; antibiotic; target;
KW
XX veterinary medicine; treatment; human; industrial process;
XX bacterial control; ss.
XX
XX Synthetic.
OS
XX WO9803533-A1.
PN
XX
XX 29-JAN-1998.
PD
XX
XX 23-JUL-1997; 97WO-US012961.
PF
XX
XX 24-JUL-1996; 96US-00685575.
PR
XX
XX (OLIG-) OLIGOS ETC & OLIGOS THERAPEUTICS INC.
PA
XX Arrow A, Dale RMK, Thompson TL;
PI
XX
XX WPI; 1998-120687/11.
DR
XX
XX Treating bacterial infections in humans or animals with
PT oligo:nucleotide(s) - resistant to nuclease and targeted to bacterial
PT nucleic acid or proteins, also conjugates of these oligo:nucleotide(s)
PT with antibiotics.
XX
XX Claim 49; Page 83; 163pp; English.
PS
XX
XX This antisense oligonucleotide is nuclease resistant and can be used in
CC the treatment of animals, including humans, having a bacterial infection.
CC The treatment comprises administration of such nuclease resistant
CC oligonucleotides, targeted to a nucleic acid or protein of the bacterium,
CC and formulated with a carrier. A compound comprising this nuclease
CC resistant oligonucleotide can be covalently linked to an antibiotic. The
CC method is used to treat infections by a wide variety of Gram-positive and
CC Gram-negative, or acid-fast, bacteria, in human and veterinary medicine.
CC The methods are particularly used in immuno-compromised individuals (e.g.
CC patients with acquired immunodeficiency syndrome or those receiving
CC chemotherapy or radiation therapy), optionally in combination with, or
CC fused to, antiviral or other antimicrobial oligonucleotides. Apart from
CC therapeutic use, the oligonucleotides can be used to control bacteria in
CC laboratory cultures, foods, beverages and industrial processes. The
CC oligonucleotides are specific for bacteria, without affecting metabolism
CC in mammalian cells. They may also activate RNase H and have a general,
CC non-specific immune-stimulating effect. The oligonucleotides can be
CC administered orally, intranasally, rectally, topically or by injection,
CC optionally coupled to an agent (e.g. carbohydrate or polyamine) that
CC enhances cellular uptake
XX
XX Sequence 24 BP; 2 A; 6 C; 5 G; 11 T; 0 U; 0 Other;
SQ
Query Match 1.0%; Score 17.8; DB 1; Length 24;
Best Local Similarity 90.5%; Pred. No. 1.8e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1435 GAGGATGCCATGAACATCCA 1455
Db 21 GAGAGGCCATGAACATCCA 1
|||||

```

RESULT 102  
AAV05313

```

ID AAV05313 standard; DNA; 25 BP.
XX
XX AAV05313;
AC
XX
XX 06-JUL-1998 (first entry)
DT
XX
XX Kinase domain 5' PCR primer.
DE
XX
XX Williams syndrome cognitive profile; WSCP; cognition; LIM-kinase 1;
KW LIMK1 gene; supra-vascular aortic stenosis; protein kinase; human; PCR;
XX primer; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
XX
XX WO9801740-A2.
PN
XX
XX 15-JAN-1998.
PD
XX
XX 07-JUL-1997; 97WO-US011687.
PF
XX
XX 10-JUL-1996; 96US-00678039.
PR
XX
XX (UTAH ) UNIV UTAH RES FOUND.
PA
XX Keating MT, Morris CA;
PI
XX WPI; 1998-101185/09.
DR
XX
XX Diagnosing Williams syndrome cognitive profile from hemi-zygosity of
PT LIMK1 - gene on chromosome 7 encoding new kinase, allowing
PT differentiation from classic Williams syndrome and supra-vascular aortic
PT stenosis.
XX
XX Example 3; Page 22; 62pp; English.
PS
XX
XX This oligonucleotide was designed to amplify the region of homology in
CC the kinase domains of PDGF receptor, HER2, HER3, FGF-FUG, FGF-BEK,
CC insulin receptor and IRR. It was used with another kinase homology domain
CC -based primer (see AAV05314) in the amplification of human LIM-kinase 1
CC (LIMK1) sequences. The LIMK1 gene is composed of 16 exons (see AAV05315
CC and AA79959-T99529) and is located 15.4 kb 3' of elastin in chromosome
CC 7. It encodes a novel protein kinase (see AAW46576). Williams syndrome
CC cognitive profile (WSCP) is detected by determining zygosity of the LIMK1
CC locus, with hemizyosity being indicative of impaired visuo-spatial
CC constructive cognition. Chromosome 7 deletion analysis allows
CC discrimination between WSCP, SVAS (supra-vascular aortic stenosis) and
CC Williams syndrome
XX
XX Sequence 25 BP; 4 A; 6 C; 9 G; 6 T; 0 U; 0 Other;
SQ
Query Match 1.0%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 2e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1033 GACTTTGGCTGGCCGAGCCCAAG 1056
Db 1 GACTTTGGCTGGCTCGAGCATG 24
|||||

```

RESULT 103  
ABN15302

ID ABN15302 standard; DNA; 25 BP.

XX  
AC ABN15302;

XX 29-MAY-2002 (first entry)

XX Human GDMLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:15294.

XX Human; genome-derived myosin-like protein 1; GDMLP-1; heart;  
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
XX skeletal muscle disorder; amplicon; screening; ss.

XX OS Homo sapiens.  
 XX AC  
 XX PN WO200192524-A2.  
 XX PD 06-DEC-2001.  
 XX PF 25-MAY-2001; 2001WO-US016981.  
 XX PR 26-MAY-2000; 2000US-0207456P.  
 XX PR 21-SEP-2000; 2000US-0234687P.  
 XX PR 27-SEP-2000; 2000US-0236359P.  
 XX PR 04-OCT-2000; 2000GB-00024263.  
 XX PR 30-JAN-2001; 2001WO-US000661.  
 XX PR 30-JAN-2001; 2001WO-US000662.  
 XX PR 30-JAN-2001; 2001WO-US000663.  
 XX PR 30-JAN-2001; 2001WO-US000664.  
 XX PR 30-JAN-2001; 2001WO-US000665.  
 XX PR 30-JAN-2001; 2001WO-US000666.  
 XX PR 30-JAN-2001; 2001WO-US000667.  
 XX PR 30-JAN-2001; 2001WO-US000668.  
 XX PR 30-JAN-2001; 2001WO-US000669.  
 XX PR 05-FEB-2001; 2001WO-US000670.  
 XX PR 05-FEB-2001; 2001US-0266860P.  
 XX PA (AEOM-) AEOMICA INC.  
 XX PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
 XX PR WPI; 2002-179446/23.  
 XX DR  
 XX XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
 PT or as specific biomolecule capture probes for surface-enhanced laser  
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
 XX  
 XX Disclosure; SEQ ID NO 15294; 214pp; English.  
 XX PS  
 XX PA The present invention describes a human genome-derived myosin-like  
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
 CC nucleic acids can be used as probes to detect, characterise and quantify  
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
 CC protein variants having desired phenotypic improvements, and for  
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
 CC -1 proteins, as standards in assays used to determine the concentration  
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
 CC capture probes for surface-enhanced laser desorption/ionisation, as  
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMPLP-1, in particular heart  
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 XX  
 XX Sequence 25 BP; 2 A; 11 C; 4 G; 8 T; 0 U; 0 Other;  
 SQ  
 Query Match 1.0%; Score 17.6; DB 1; Length 25;  
 Best Local Similarity 83.3%; Pred. No. 2e+02;  
 Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 555 CCTCAGCCGCCGCTCCGCTCGGT 578  
 DB 2 CCTCATCCCGCGCTCCACCGGT 25  
 RESULT 104  
 ABN15304

ID XX ABN15304 standard; DNA; 25 BP.  
 AC XX ABN15304;  
 XX DT 29-MAY-2002 (first entry)  
 XX DE Human GDMPLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:15296.  
 XX KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
 KW skeletal muscle disorder; amplicon; screening; ss.  
 OS Homo sapiens.  
 XX WO200192524-A2.  
 XX PN 06-DEC-2001.  
 XX PD 25-MAY-2001; 2001WO-US016981.  
 XX PR 26-MAY-2000; 2000US-0207456P.  
 XX PR 21-SEP-2000; 2000US-0234687P.  
 XX PR 27-SEP-2000; 2000US-0236359P.  
 XX PR 04-OCT-2000; 2000GB-00024263.  
 XX PR 30-JAN-2001; 2001WO-US000661.  
 XX PR 30-JAN-2001; 2001WO-US000662.  
 XX PR 30-JAN-2001; 2001WO-US000663.  
 XX PR 30-JAN-2001; 2001WO-US000664.  
 XX PR 30-JAN-2001; 2001WO-US000665.  
 XX PR 30-JAN-2001; 2001WO-US000666.  
 XX PR 30-JAN-2001; 2001WO-US000667.  
 XX PR 30-JAN-2001; 2001WO-US000668.  
 XX PR 30-JAN-2001; 2001WO-US000669.  
 XX PR 05-FEB-2001; 2001WO-US000670.  
 XX PR 05-FEB-2001; 2001US-0266860P.  
 XX PA (AEOM-) AEOMICA INC.  
 XX PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
 XX PR WPI; 2002-179446/23.  
 XX DR  
 XX XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
 PT or as specific biomolecule capture probes for surface-enhanced laser  
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
 XX  
 XX Disclosure; SEQ ID NO 15296; 214pp; English.  
 XX PS  
 XX PA The present invention describes a human genome-derived myosin-like  
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
 CC nucleic acids can be used as probes to detect, characterise and quantify  
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
 CC protein variants having desired phenotypic improvements, and for  
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
 CC -1 proteins, as standards in assays used to determine the concentration  
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
 CC capture probes for surface-enhanced laser desorption/ionisation, as  
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMPLP-1, in particular heart  
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 XX  
 XX Sequence 25 BP; 2 A; 12 C; 4 G; 7 T; 0 U; 0 Other;  
 SQ

```
Query Match      1.0%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 2e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 556 CTCAGCGCGCGCTCGCGTGC 579
Db 1 CTCATCCTCCGCTCCATCGTGC 24

RESULT 105
ABV82337/C
ID ABV82337 standard; DNA; 25 BP.
XX
AC ABV82337;
XX
DT 03-JAN-2003 (first entry)
XX
DE Human HTPL scanning oligonucleotide SEQ ID 3583.
XX
KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
OS Homo sapiens.
XX
PN EP1229046-A2.
XX
PD 07-AUG-2002.
XX
PF 28-JAN-2002; 2002EP-00001167.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 23-MAY-2001; 2001US-00864761.
PR 09-OCT-2001; 2001US-0327898P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Zhan J;
XX
XX WPI; 2002-676582/73.
XX
XX Novel isolated human testis expressed Patched like protein (HTPL), useful
XX for identifying agonist and antagonist and specific binding partners, and
XX for treating subjects having defects in HTPL.
XX
XX Example 2; Page 533; 718pp; English.
XX
XX The present invention relates to human testis expressed Patched like
XX protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
XX has two isoforms, with a few single base pair differences between the
XX two. One of the single base pair changes introduces a premature stop
XX codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
XX shares an overall structure organisation with the Patched protein. The
XX shared structural features strongly imply that HTPL plays a role similar
XX to that of Patched, and is a potential tumour suppressor. HTPL is
XX important in regulating male germ cell development, and the HTPL gene was
XX mapped to human chromosome 10p12.1. HTPL and its coding sequence are
XX useful for diagnosing a disorder caused by mutation in HTPL, and in
XX therapy and manufacture of a medicament for treatment or prevention of
XX such disorder associated with decreased expression or activity of human
XX HTPL. Such disorders include disorders of testis, or adrenal, adult and
XX foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
XX skeletal muscle or colon function. HTPL proteins and nucleic acids are
XX clinically useful diagnostic markers and potential therapeutic agents for
XX male infertility and cancer. The present oligonucleotide was used in an
XX example from the invention
```

```
Sequence 25 BP; 6 A; 11 C; 2 G; 6 T; 0 U; 0 Other;
Query Match      1.0%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 2e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 216 AGGCTGATGATGATGATGATG 239
Db 24 AGGCAGATGATGATGATGATG 1

RESULT 106
ABV82334/C
ID ABV82334 standard; DNA; 25 BP.
XX
AC ABV82334;
XX
DT 03-JAN-2003 (first entry)
XX
DE Human HTPL scanning oligonucleotide SEQ ID 3580.
XX
KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
OS Homo sapiens.
XX
PN EP1229046-A2.
XX
PD 07-AUG-2002.
XX
PF 28-JAN-2002; 2002EP-00001167.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 23-MAY-2001; 2001US-00864761.
PR 09-OCT-2001; 2001US-0327898P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Zhan J;
XX
XX WPI; 2002-676582/73.
XX
XX Novel isolated human testis expressed Patched like protein (HTPL), useful
XX for identifying agonist and antagonist and specific binding partners, and
XX for treating subjects having defects in HTPL.
XX
XX Example 2; Page 533; 718pp; English.
XX
XX The present invention relates to human testis expressed Patched like
XX protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
XX has two isoforms, with a few single base pair differences between the
XX two. One of the single base pair changes introduces a premature stop
XX codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
XX shares an overall structure organisation with the Patched protein. The
XX shared structural features strongly imply that HTPL plays a role similar
XX to that of Patched, and is a potential tumour suppressor. HTPL is
XX important in regulating male germ cell development, and the HTPL gene was
XX mapped to human chromosome 10p12.1. HTPL and its coding sequence are
XX useful for diagnosing a disorder caused by mutation in HTPL, and in
XX therapy and manufacture of a medicament for treatment or prevention of
XX such disorder associated with decreased expression or activity of human
XX HTPL. Such disorders include disorders of testis, or adrenal, adult and
XX foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
XX skeletal muscle or colon function. HTPL proteins and nucleic acids are
XX clinically useful diagnostic markers and potential therapeutic agents for
XX male infertility and cancer. The present oligonucleotide was used in an
XX example from the invention
```



```
CC example from the invention
XX
SQ Sequence 25 BP; 7 A; 11 C; 2 G; 5 T; 0 U; 0 Other;
    Query Match      1.0%; Score 17.6; DB 1; Length 25;
    Best Local Similarity 83.3%; Pred. No. 2a+02;
    Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
    QY 218 GCCTGGATGAGTGGTGGTGGTG 241
       ||||| ||||| ||||| ||||| |||||
    Db 25 GCCAGGATGTAGTGGTGGTG 2

RESULT 107
ACI83994/c
ID ACK27269 standard; DNA; 25 BP.
XX
AC ACK27269;
XX
DT 14-OCT-2003 (first entry)
XX
DE Human microarray DNA oligonucleotide SEQ ID NO 127250.
XX
KW EST; ss; probe; expressed sequence tag; microarray; gene expression;
KW genetic variation; biallelic marker; polymorphism; human;
KW cross-species comparison.
XX
OS Homo sapiens.
XX
PN US2003104410-A1.
XX
PD 05-JUN-2003.
XX
PF 15-MAR-2002; 2002US-00098263.
XX
PR 16-MAR-2001; 2001US-0276759P.
XX
PA (AFFY-) AFFYMETRIX INC.
XX
PI Mittmann MP;
XX
DR WPI; 2003-567953/53.
XX
PT New array of nucleic acid probes, useful for in situ hybridization, in
PT Southern, Northern or dot-blot hybridization to identify or detect the
PT sequence or specific mutations of any gene.
XX
PS Claim 1; SEQ ID NO 127250; 9pp; English.
XX
CC The invention discloses a microarray comprising a plurality of nucleic
CC acid probes including one of 2,018,500 fully defined sequences, or its
CC perfect match, perfect mismatch, antisense match or antisense mismatch.
CC Also disclosed is a method of gene expression analysis. The array is used
CC in monitoring gene expression levels by hybridisation to a DNA library,
CC in analysis of genetic variation or in hybridisation of tag-labelled
CC compounds. The nucleic acid probes are specifically designed for analysis
CC of at least one target sequence. The method of analysis comprises
CC hybridising at least one or more nucleic acids to at least two or more
CC nucleic acid probes and detecting the hybridisation. The nucleic acid
CC probes are attached to a solid support. The analysis comprises monitoring
CC gene expression levels, identifying biallelic markers or polymorphisms,
CC or family members of a gene and a cross-species comparison. Each of the
CC probes is useful in situ hybridisation, in Southern, Northern or dot-
CC blot hybridisation to identify or detect the sequence or specific
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
CC primer extensions or in screening cDNA or genomic libraries or subclones
CC for additional subclones containing segments of DNA that have been
CC isolated and previously sequenced. The sequence presented is one of the
CC nucleic acid probes incorporated in the microarray. Note: The sequence
CC data for this patent can also be obtained in electronic format directly
CC from USPTO at seqdata.uspto.gov/sequence.html
XX
XX
```

```
SQ Sequence 25 BP; 8 A; 4 C; 5 G; 8 T; 0 U; 0 Other;
    Query Match      1.0%; Score 17.6; DB 1; Length 25;
    Best Local Similarity 83.3%; Pred. No. 2a+02;
    Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
    QY 794 TTACGCTACATGACATTATCCACA 817
       ||||| ||||| ||||| ||||| |||||
    Db 25 TTATGCGACATGACATTGTTTACA 2

RESULT 108
ACI83994/c
ID ACI83994 standard; DNA; 25 BP.
XX
AC ACI83994;
XX
DT 14-OCT-2003 (first entry)
XX
DE Human microarray DNA oligonucleotide SEQ ID NO 83985.
XX
KW EST; ss; probe; expressed sequence tag; microarray; gene expression;
KW genetic variation; biallelic marker; polymorphism; human;
KW cross-species comparison.
XX
OS Homo sapiens.
XX
PN US2003104410-A1.
XX
PD 05-JUN-2003.
XX
PF 15-MAR-2002; 2002US-00098263.
XX
PR 16-MAR-2001; 2001US-0276759P.
XX
PA (AFFY-) AFFYMETRIX INC.
XX
PI Mittmann MP;
XX
DR WPI; 2003-567953/53.
XX
PT New array of nucleic acid probes, useful for in situ hybridization, in
PT Southern, Northern or dot-blot hybridization to identify or detect the
PT sequence or specific mutations of any gene.
XX
PS Claim 1; SEQ ID NO 83985; 9pp; English.
XX
CC The invention discloses a microarray comprising a plurality of nucleic
CC acid probes including one of 2,018,500 fully defined sequences, or its
CC perfect match, perfect mismatch, antisense match or antisense mismatch.
CC Also disclosed is a method of gene expression analysis. The array is used
CC in monitoring gene expression levels by hybridisation to a DNA library,
CC in analysis of genetic variation or in hybridisation of tag-labelled
CC compounds. The nucleic acid probes are specifically designed for analysis
CC of at least one target sequence. The method of analysis comprises
CC hybridising at least one or more nucleic acids to at least two or more
CC nucleic acid probes and detecting the hybridisation. The nucleic acid
CC probes are attached to a solid support. The analysis comprises monitoring
CC gene expression levels, identifying biallelic markers or polymorphisms,
CC or family members of a gene and a cross-species comparison. Each of the
CC probes is useful in situ hybridisation, in Southern, Northern or dot-
CC blot hybridisation to identify or detect the sequence or specific
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
CC primer extensions or in screening cDNA or genomic libraries or subclones
CC for additional subclones containing segments of DNA that have been
CC isolated and previously sequenced. The sequence presented is one of the
CC nucleic acid probes incorporated in the microarray. Note: The sequence
CC data for this patent can also be obtained in electronic format directly
CC from USPTO at seqdata.uspto.gov/sequence.html
XX
XX
```

Query Match 1.0%; Score 17.6; DB 1; Length 25;  
Best Local Similarity 83.3%; Pred.No.2e+02;  
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1056 GTCAATCCCAACAAGACATATCTC 1079  
DB 25 GTCAAAACCTAAGAAGACCTACTC 2

RESULT 109  
ABK66872/c  
ID ABK66872 standard; DNA; 26 BP.  
XX AC ABK66872;

XX 02-JUL-2002 (first entry)  
XX Human gene specific PCR primer #960.  
KW Primer; ss; DNA microarray; differential expression analysis; human.  
XX Homo sapiens.  
XX US6352829-B1.  
XX 05-MAR-2002.  
XX 05-JAN-1999; 99US-00225928.  
XX 21-MAY-1997; 97US-00859998.  
XX (CLON-) CLONTECH LAB INC.  
XX Chenchik A, Johadze G, Bibilashvili R;  
XX WPI; 2002-314699/35.

PT Producing sub-population of labeled nucleic acids, useful for analyzing  
PT differences in RNA profiles between several different physiological  
PT sources, using set of distinct gene specific primers.

PS Example 3; SEQ ID NO 960; lpp; English.

CC The invention relates to producing a sub-population of labeled nucleic  
CC acids (NAs) comprising contacting a NA sample from a physiological  
CC source, with a pool of 50 distinct gene specific primers under suitable  
CC conditions to enzymatically generate sub-population of NAs, where each  
CC gene specific primer has a sequence complementary to a distinct mRNA, and  
CC each labeled NA is generated using a single gene specific primer. The  
CC method is useful for producing a sub-population of labeled NAs which is  
CC useful for analysing the differences in the RNA profiles between several  
CC different physiological sources, where the method comprises producing  
CC subpopulation of labeled NAs for the different physiological sources,  
CC comprising the populations for each physiological source to identify  
CC differences in the population, where the comparison is preferably  
CC performed by hybridising the labeled NAs for each of the distinct  
CC physiological sources to an array of probe NAs stably associated with the  
CC surface of a substrate to produce a hybridisation pattern for each of the  
CC sources, and comparing the patterns for each of the sources, where  
CC differential gene expression assays are utilised in differential  
CC expression analysis of diseased a normal tissue e.g. neoplastic a normal  
CC tissue, or different tissue or sub-tissue types. The present sequence is a  
CC human gene specific PCR primer used in the method of the invention. Note:  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from USPTO  
CC at <http://wipo.seqdata.uspto.gov/sequence.html?DocID=6352829B1>

XX Sequence 26 BP; 10 A; 5 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17.6; DB 1; Length 26;  
Best Local Similarity 83.3%; Pred.No.2.1e+02;  
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 826 TCCCTCACCCCTTGTCTTTGAGTAC 849  
DB 25 TCTGTACCCCTTGTCTTTGAGTGC 2

RESULT 110  
ABX17595  
ID ABX17595 standard; DNA; 26 BP.  
XX AC ABX17595;

XX 05-FEB-2003 (first entry)

DE RTQ-PCR probe #2 for human protein NOV19.

XX Human; ss; NOVX; adrenoleukodystrophy; haemophilia; stoke; VHL; PCR;  
KW congenital adrenal hyperplasia; haemophilia; hypercoagulation;  
KW idiopathic thrombocytopenic purpura; autoimmune disease; allergy;  
KW immunodeficiencies; transplantation; Von Hippel-Lindau syndrome;  
KW Alzheimer's disease; tuberosus sclerosis; Parkinson's disease; epilepsy;  
KW Huntington's disease; cerebral palsy; Lesch-Nyhan syndrome; pain;  
KW multiple sclerosis; ataxia-telangiectasia; leukodystrophy; anxiety;  
KW behavioural disorder; addiction; neuroprotection; diabetes; ARDS;  
KW renal artery stenosis; interstitial nephritis; glomerulonephritis;  
KW polycystic kidney disease; systemic lupus erythematosus; IGA; probe;  
KW renal tubular acidosis; immunoglobulin A nephropathy; hypercalcaemia;  
KW cirrhosis; transplantation; asthma; emphysema; scleroderma; GVHD;  
KW adult respiratory distress syndrome; graft versus host disease;  
KW lymphedema; fertility; pancreatitis; obesity; haemophilia; ulcer;  
KW anaemia; cancer; trauma; regeneration; infection; RTQ-PCR;  
KW real-time quantitative PCR.

XX Homo sapiens.

XX WO200281629-A2.

XX 17-OCT-2002.

XX 03-APR-2002; 2002WO-US010522.

XX 03-APR-2001; 2001US-0281086P.

XX 05-APR-2001; 2001US-0281136P.

XX 05-APR-2001; 2001US-0281863P.

XX 06-APR-2001; 2001US-0281906P.

XX 10-APR-2001; 2001US-0282020P.

XX 12-APR-2001; 2001US-0282934P.

XX 19-APR-2001; 2001US-0283512P.

XX 23-APR-2001; 2001US-0285890P.

XX 24-APR-2001; 2001US-0286068P.

XX 25-APR-2001; 2001US-0286292P.

XX 27-APR-2001; 2001US-0287233P.

XX 02-MAY-2001; 2001US-0288257P.

XX 12-MAY-2001; 2001US-0291134P.

XX 17-MAY-2001; 2001US-0291725P.

XX 31-MAY-2001; 2001US-0294771P.

XX 08-JUN-2001; 2001US-0296965P.

XX 18-JUN-2001; 2001US-0299128P.

XX 12-JUL-2001; 2001US-0305063P.

XX 14-NOV-2001; 2001US-0332780P.

XX 04-JAN-2002; 2002US-0345221P.

XX 02-APR-2002; 2002US-00345221.

XX (CURA-) CURAGEN CORP.

XX Spytak KA, Li L, Edinger SR, Ellerman K, Stone DJ, Malyankar UM;  
PI Shimkets RA, Guo X, Anderson DW, Patturajan M, Berghs C, Gerlach V;  
PI Taupier RJ, Pena CEA, Padigaru M, Liu Y, Burgess CE, Miller CE;  
PI Gusev VT, Kekuda R, Gorman L, Zerhusen BD, Baumgartner JC;  
PI Tchernev VT, Vernet CAM, Smithson G, Heyes MP, Shency SG, Liu X;  
PI Gangolli EA;  
XX WPI; 2003-046863/04.



```
CC restenosis treatment
XX
SQ Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
    Query Match      1.0%; Score 17.4; DB 1; Length 19;
    Best Local Similarity 94.7%; Pred. No. 1.7e+02;
    Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
    QY 993 GAACCTGCTCATCAACGAG 1011
    Db 1 GAACCTGCTCATCAATGAG 19

RESULT 113
AAH57919
ID AAH57919 standard; DNA; 19 BP.
XX
AC AAH57919;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:343.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytosatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX WO200130362-A2.
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX 26-OCT-1999; 99US-0161532P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
XX
XX WFI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX that cleave RNA encoding cytokines involved in inflammation, matrix
XX metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 96; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX ophthalmological, vulnery, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, and preventing
XX prematurity and retinal detachment, and for treating and preventing
```

```
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
    Query Match      1.0%; Score 17.4; DB 1; Length 19;
    Best Local Similarity 94.7%; Pred. No. 1.7e+02;
    Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
    QY 993 GAACCTGCTCATCAACGAG 1011
    Db 1 GAACCTGCTCATCAATGAG 19

RESULT 114
AAH57923
ID AAH57923 standard; DNA; 19 BP.
XX
AC AAH57923;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:347.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytosatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX WO200130362-A2.
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX 26-OCT-1999; 99US-0161532P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
XX
XX WFI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX that cleave RNA encoding cytokines involved in inflammation, matrix
XX metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 97; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX ophthalmological, vulnery, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
```

CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention  
XX  
SQ Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;  
Query Match 1.0%; Score 17.4; DB 1; Length 19;  
Best Local Similarity 94.7%; Pred. No. 1.7e+02;  
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 1028 TGGCTGACTTGGCTGGC 1046  
Db 1 TGGCTGACTTGGCTGGC 19  
RESULT 115  
ACI39576  
ID ACI39576 standard; DNA; 25 BP.  
XX  
AC ACI39576;  
XX  
13-OCT-2003 (first entry)  
DE Human microarray DNA oligonucleotide SEQ ID NO 39567.  
XX  
EST; ss; probe; expressed sequence tag; microarray; gene expression;  
KW genetic variation; biallelic marker; polymorphism; human;  
KW cross-species comparison.  
XX  
OS Homo sapiens.  
XX  
US2003104410-A1.  
XX  
05-JUN-2003.  
PD  
PF 15-MAR-2002; 2002US-00098263.  
PR 16-MAR-2001; 2001US-0276759P.  
XX  
PA (AFFY-) AFFYMETRIX INC.  
XX  
Mittmann MP;  
XX  
WPI; 2003-567953/53.  
DR  
XX  
New array of nucleic acid probes, useful for in situ hybridization, in  
PT Southern, Northern or dot-blot hybridization to identify or detect the  
PT sequence or specific mutations of any gene.  
XX  
Claim 1; SEQ ID NO 39567; 9pp; English.  
PS  
XX  
The invention discloses a microarray comprising a plurality of nucleic  
CC acid probes including one of 2,018,500 fully defined sequences, or its  
CC perfect match, perfect mismatch, antisense match or antisense mismatch.  
CC Also disclosed is a method of gene expression analysis. The array is used  
CC in monitoring gene expression levels by hybridisation to a DNA library,  
CC in analysis of genetic variation or in hybridisation of tag-labelled  
CC compounds. The nucleic acid probes are specifically designed for analysis  
CC of at least one target sequence. The method of analysis comprises  
CC hybridising at least one or more nucleic acids to at least two or more  
CC nucleic acid probes and detecting the hybridisation. The nucleic acid  
CC probes are attached to a solid support. The analysis comprises monitoring  
CC gene expression levels, identifying biallelic markers or polymorphisms,  
CC or family members of a gene and a cross-species comparison. Each of the  
CC nucleic acids further comprises a tag sequence. The array of nucleic acid  
CC probes is useful in in situ hybridisation, in Southern, Northern or dot-  
CC blot hybridisation to identify or detect the sequence or specific  
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by  
CC primer extensions or in screening cDNA or genomic libraries or subclones  
CC for additional subclones containing segments of DNA that have been  
CC isolated and previously sequenced. The sequence presented is one of the

CC nucleic acid probes incorporated in the microarray. Note: The sequence  
CC data for this patent can also be obtained in electronic format directly  
CC from USPTO at seqdata.uspto.gov/sequence.html  
XX  
SQ Sequence 25 BP; 7 A; 5 C; 9 G; 4 T; 0 U; 0 Other;  
Query Match 1.0%; Score 17.2; DB 1; Length 25;  
Best Local Similarity 86.4%; Pred. No. 2.5e+02;  
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Qy 1256 TAGGAACCCCACTGAGGAGAC 1277  
Db 4 TAGGCACTCGAAGCTGAGGAGAC 25  
RESULT 116  
AAx29342  
ID AAX29342 standard; DNA; 20 BP.  
XX  
AC AAX29342;  
XX  
10-JUN-1999 (first entry)  
DE Chemically modified sense control probe ISIS No: 14318.  
XX  
Antisense oligonucleotide; Jun N-terminal kinase; JNK; hybridise; JNK1;  
KW JNK2; JNK3; cell cycle progression; phosphorylation; tumour; probe;  
KW hyperproliferative disease; human; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
WO9909214-A1.  
PN  
25-FEB-1999.  
PD  
PF 07-AUG-1998; 98WO-US016488.  
XX  
PR 13-AUG-1997; 97US-00910629.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
Mckay R, Dean N, Monia BP, Nero PS, Gaarde WA;  
XX  
WPI; 1999-181060/15.  
DR  
XX  
New antisense oligonucleotides that detect and modulate the expression of  
PT Jun N-terminal kinase proteins - useful for treating hyperproliferative  
PT diseases and inhibiting tumor growth in animals, and for modulating  
PT protein phosphorylation by these proteins.  
XX  
Example 4; Page 92; 190pp; English.  
PS  
XX  
The invention relates to antisense oligonucleotides that detect and  
CC modulate the expression of Jun N-terminal kinase (JNK) proteins. The  
CC oligonucleotides specifically hybridize to a nucleic acid encoding a  
CC JNK1, JNK2 or JNK3 protein, and which modulate expression of these  
CC proteins. The oligonucleotides are useful for modulating JNK protein  
CC expression and cell cycle progression in cultured cells or animal cells.  
CC The oligonucleotides are also useful for modulating the phosphorylation  
CC of a protein that has been phosphorylated by a JNK protein, and the  
CC expression of a cellular protein that promotes one or more metastatic  
CC events. The oligonucleotides also form pharmaceutical compositions for  
CC treating animals with a hyperproliferative disease, and for inhibiting  
CC tumor growth in an animal  
XX  
SQ Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;  
Query Match 1.0%; Score 17; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 2.1e+02;  
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1033 GACTTTGGCTGGCCCG 1049

|    |  |
|----|--|
| XX | Antisense oligonucleotide ISIS no.15354 to human JNK2 gene.                  |
| XX | Antisense; E-selectin; TNF alpha; cell adhesion;                             |
| XX | tumour necrosis factor alpha; phosphorothioate; methoxyethoxy; sepsis;       |
| KW | rheumatoid arthritis; inflammatory; immune disease;                          |
| KW | inflammatory bowel disease; allergic contact dermatitis; psoriasis;          |
| KW | diabetes; Grave's disease; allograft rejection; cancer; antibacterial;       |
| KW | immunosuppressive; antipsoriatic; antidiabetic; antichryoid; cytostatic;     |
| KW | dermatological; antiallergic; Ha-ras; c-ras; c-ras; c-Jun N-terminal kinase; |
| KW | JNK; ss.   |
| XX | Homo sapiens.  |
| OS |  |
| XX |  |
| PH | Key  |
| FT | modified_base  |
| FT | 1. .6  |
| FT | /*tag= a   |
| FT | /mod_base= OTHER   |
| FT | /note= "All bases are 2'-methoxyethoxy, additionally C                       |
| FT | bases are m5c"   |
| FT | 7. .15   |
| FT | modified_base  |
| FT | /*tag= b   |
| FT | /mod_base= OTHER   |
| FT | /note= "Phosphorothioate internucleotide linkage"                            |
| FT | 16. .20  |
| FT | modified_base  |
| FT | /*tag= c   |
| FT | /mod_base= OTHER   |
| FT | /note= "All bases are 2'-methoxyethoxy, additionally C                       |
| FT | bases are m5c"   |
| XX | WO200034303-A1.  |
| PN |  |
| PD | 15-JUN-2000.   |
| XX |  |
| PP | 08-DEC-1999; 99WO-US028965.  |
| XX |  |
| PR | 10-DEC-1998; 98US-00209668.  |
| XX |  |
| PA | (ISIS-) ISIS PHARM INC.  |
| PI | Monia BP, Xu XS;   |
| XX |  |
| DR | WPI; 2000-423367/36.   |
| XX |  |
| PT | Modulating cell adhesion molecule expression for treating immune or          |
| PT | inflammatory diseases involves treating cell with specific inhibitor of      |
| PT | Tumour Necrosis Factor alpha signalling molecule.                            |
| XX |  |
| PS | Claim 36; Page 46; 100pp; English.   |
| XX |  |
| CC | A novel method for modulating cell adhesion molecule expression involves     |
| CC | antisense inhibition of a tumour necrosis factor (TNF) alpha signalling      |
| CC | molecule. In the method TNF alpha signalling molecules Ha-ras, c-ras and     |
| CC | c-Jun N-terminal kinase (JNK)2 were inhibited by antisense                   |
| CC | oligonucleotides. In addition an antisense oligonucleotide to the cell       |
| CC | adhesion molecule E-selectin was also examined. The present sequence is      |
| CC | the JNK2 antisense oligonucleotide. The antisense oligonucleotides used      |
| CC | in the method contained modifications, namely phosphorothioate linkages      |
| CC | and 2'-methoxyethoxy bases. Some C residues also had a 5'-methyl             |
| CC | modification. Inhibitors of the TNF alpha signalling molecules have          |
| CC | antibacterial, immunosuppressive, antipsoriatic, antidiabetic,               |
| CC | antichryoid, cytostatic dermatological, anti-allergic and                    |
| CC | anti-inflammatory activity. The antisense inhibitors may be useful for the   |
| CC | treatment of sepsis, rheumatoid arthritis, inflammatory, immune disease,     |
| CC | inflammatory bowel disease, allergic contact dermatitis, psoriasis,          |
| CC | diabetes, Grave's disease, allograft rejection and cancer                    |
| XX |  |
| SQ | Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;                            |
|    |  |
|    | Query Match 1.0%; Score 17; DB 1; Length 20;                                 |
|    | Best Local Similarity 100.0%; Pred. No. 2.1e+02;                             |
|    | Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;                  |

QY 1033 GACTTTGGCTGGCCCG 1049  
 DB 20 GACTTTGGCTGGCCCG 4

## RESULT 119

AAAC62885  
 ID AAC62885 standard; DNA; 20 BP.  
 XX  
 AC AAC62885;

XX  
 DT 06-FEB-2001 (first entry)

XX JNK antisense oligonucleotide ISIS #14318.

XX Antisense; gene therapy; JNK2 protein; apoptosis; cancer;  
 KW cellular hyperproliferation; Alzheimer's; Parkinson's disease;  
 KW amyotrophic lateral sclerosis; retinitis; pigmentosa; epilepsy;  
 KW myocardial infarction; stroke; obstructive jaundice; polycystic kidney;  
 KW diabetes; Jun N-terminal kinase; ss.

XX Homo sapiens.

XX WO200059549-A1.

XX 12-OCT-2000.

XX 04-APR-2000; 2000WO-US008880.

XX 07-APR-1999; 99US-00287796.

XX (ISIS-) ISIS PHARM INC.

XX McKay R, Dean NM, Monia BP, Nero PS, Gaarde WA;

XX WPI; 2000-638427/61.

XX Novel methods for reducing apoptosis comprising contacting cells with  
 PT antisense oligonucleotides, useful for treating apoptotic disorders, e.g.  
 PT cancer.

XX Example 4; Page 135; 160pp; English.

XX The present invention relates to antisense oligonucleotides (AAC62844-  
 CC C63000, AAA96093-A96099 and AAA07993) that hybridize specifically to a  
 CC nucleotide encoding a Jun N-terminal kinase (JNK2) protein, resulting in  
 CC decrease of JNK2 expression and leading to induction of apoptosis. The  
 CC present sequence is one such antisense oligonucleotide. The  
 CC oligonucleotides of the present invention are useful for treating  
 CC diseases or conditions with reduced apoptosis, e.g. cancer and cellular  
 CC hyperproliferation. The oligonucleotides may also be used to increase the  
 CC stimulation of apoptotic proteins, e.g. for treating Alzheimer's or  
 CC Parkinson's disease, amyotrophic lateral sclerosis, retinitis,  
 CC pigmentosa, epilepsy, myocardial infarction, stroke, obstructive  
 CC jaundice, polycystic kidney and diabetes. The present sequence may have a  
 CC phosphorothioate backbone

XX Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;  
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCTGGCCCG 1049

DB 1 GACTTTGGCTGGCCCG 17

## RESULT 120

AAAC62874/c  
 ID AAC62874 standard; DNA; 20 BP.  
 XX  
 AC AAC62874;

XX  
 DT

XX 06-FEB-2001 (first entry)

XX JNK antisense oligonucleotide ISIS #12560.

XX Antisense; gene therapy; JNK2 protein; apoptosis; cancer;  
 KW cellular hyperproliferation; Alzheimer's; Parkinson's disease;  
 KW amyotrophic lateral sclerosis; retinitis; pigmentosa; epilepsy;  
 KW myocardial infarction; stroke; obstructive jaundice; polycystic kidney;  
 KW diabetes; Jun N-terminal kinase; ss.

XX Homo sapiens.

XX WO200059549-A1.

XX 12-OCT-2000.

XX 04-APR-2000; 2000WO-US008880.

XX 07-APR-1999; 99US-00287796.

XX (ISIS-) ISIS PHARM INC.

XX McKay R, Dean NM, Monia BP, Nero PS, Gaarde WA;

XX WPI; 2000-638427/61.

XX Novel methods for reducing apoptosis comprising contacting cells with  
 PT antisense oligonucleotides, useful for treating apoptotic disorders, e.g.  
 PT cancer.

XX Claim 3; Page 133; 160pp; English.

XX The present invention relates to antisense oligonucleotides (AAC62844-  
 CC C63000, AAA96093-A96099 and AAA07993) that hybridize specifically to a  
 CC nucleotide encoding a Jun N-terminal kinase (JNK2) protein, resulting in  
 CC decrease of JNK2 expression and leading to induction of apoptosis. The  
 CC present sequence is one such antisense oligonucleotide. The  
 CC oligonucleotides of the present invention are useful for treating  
 CC diseases or conditions with reduced apoptosis, e.g. cancer and cellular  
 CC hyperproliferation. The oligonucleotides may also be used to increase the  
 CC stimulation of apoptotic proteins, e.g. for treating Alzheimer's or  
 CC Parkinson's disease, amyotrophic lateral sclerosis, retinitis,  
 CC pigmentosa, epilepsy, myocardial infarction, stroke, obstructive  
 CC jaundice, polycystic kidney and diabetes. The present sequence may have a  
 CC phosphorothioate backbone

XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;  
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTTGGCTGGCCCG 1049

DB 20 GACTTTGGCTGGCCCG 4

## RESULT 121

AAH23754/c

ID AAH23754 standard; DNA; 20 BP.

XX AAH23754;

XX 13-AUG-2001 (first entry)

XX JNK1 antisense oligonucleotide, JNK2AS, (ISIS #12560).

XX JNK; jun kinase; antisense; cytostatic; cancer;  
 KW 2'-O-methoxyethyl oligonucleotide; MOE; phosphorothioate; ss.  
 XX Synthetic.





PT Inhibiting angiogenesis in a subject, involves administering at least one  
 PT antiangiogenic nucleic acid molecule to the subject.

PS Claim 2; Page 25; 276pp; English.

XX The invention relates to inhibiting angiogenesis in a subject, comprising  
 CC administering at least one antiangiogenic nucleic acid molecule. Also  
 CC included is a kit comprising a first container housing the antiangiogenic  
 CC nucleic acids, and instructions for administering them to a subject  
 CC having a condition characterised by unwanted angiogenesis. The method is  
 CC useful for inhibiting angiogenesis associated with solid tumour growth,  
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,  
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,  
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,  
 CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque  
 CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,  
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and  
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic  
 CC acid of the invention

XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;  
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTGGCCTGGCCCG 1049

DB 20 GACTTGGCCTGGCCCG 4

RESULT 124

ABL39057/c  
 ID ABL39057 standard; DNA; 20 BP.

AC ABL39057;

DT 16-APR-2002 (first entry)

DE Immunostimulatory nucleic acid SEQ ID NO: 463.

XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;  
 KW angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.

XX Synthetic.

OS Key Location/Qualifiers

FT modified\_base 1..20

FT /tag= a

FT /mod\_base= OTHER

FT /note= "phosphorothioate backbone"

XX WO200197843-A2.

XX 27-DEC-2001.

XX 22-JUN-2001; 2001WO-US020154.

XX 22-JUN-2000; 2000US-0213346P.

XX (IOWA ) UNIV IOWA RES FOUND.

PI Weiner G, Hartmann G;

XX WPI; 2002-154611/20.

XX Treating or preventing cancer, such as basal cell carcinoma, comprises  
 PT administering immunostimulatory nucleic acids that induce expression of  
 PT cell surface antigens and antibodies to a subject having or at risk of  
 PT developing cancer.

XX Disclosure; Page 212; 312pp; English.

CC The present invention relates to methods for treating or preventing  
 CC cancer, involving administering to a subject having or at risk of  
 CC developing cancer immunostimulatory nucleic acids that induce expression  
 CC of cell surface antigens and antibodies. The methods are useful for  
 CC treating or preventing cancer such as basal cell carcinoma, bladder  
 CC cancer, bone cancer, brain and central nervous system (CNS) cancer,  
 CC breast cancer, cervical cancer, colon and rectum cancer, connective  
 CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx  
 CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-  
 CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian  
 CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin  
 CC cancer, stomach cancer, testicular cancer, and uterine cancer. The  
 CC present sequence is an immunostimulatory oligonucleotide described in the  
 CC exemplification of the invention

XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 2.1e+02;

Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTGGCCTGGCCCG 1049

DB 20 GACTTGGCCTGGCCCG 4

RESULT 125

ADA26589

ID ADA26589 standard; DNA; 20 BP.

XX AC ADA26589;

XX 20-NOV-2003 (first entry)

DE Human JNK2 sense control oligonucleotide ISIS12560.

XX ss; human; Jun N-terminal kinase; JNK1; JNK2; JNK3; cytostatic;  
 KW antiinflammatory; apoptosis; prostate cancer; prostate tumour;  
 KW inflammation; fibrosis; fibrotic disease; fibrotic scarring;  
 KW peritoneal adhesion; lung fibrosis; conjunctival scarring;  
 KW hyperproliferative disease; cancer; probe.

XX Homo sapiens.

XX US2003004120-A1.

XX 02-JAN-2003.

XX 31-JAN-2001; 2001US-00774809.

XX 13-AUG-1997; 97US-00910629.

XX 07-AUG-1998; 98US-00130616.

XX 07-APR-1999; 99US-00287796.

XX 15-SEP-1999; 99US-00396902.

XX (MCKA/) MCKAY R.

XX (DEAN/) DEAN N M.

XX (MONI/) MONIA B P.

XX (NERO/) NERO P.

XX (GAAR/) GAARDE W A.

XX Mckay R, Dean NM, Monia BP, Nero P, Gaarde WA;

XX WPI; 2003-311908/30.

XX New oligonucleotides which hybridizes to, and modulates the expression of  
 PT Jun N-terminal kinase, useful for treating a disease or condition  
 PT characterized by a reduction in apoptosis, e.g. prostate cancer,  
 PT inflammation or fibrosis.

XX Example 4; Page 26; 69pp; English.

XX The invention relates to an oligonucleotide (antisense, AS) comprising 8-

30 nucleotides connected by covalent linkages, where the oligonucleotide has a sequence specifically hybridisable with a nucleic acid encoding a Jun N-terminal kinase (JNK) protein and modulates the expression of the JNK protein. Also included are a pharmaceutical composition comprising the AS oligonucleotide (or its bioequivalent, and a pharmaceutical carrier), treating an animal having/suspected of having/prone to having a hyperproliferative disease (by administering to a prophylactic or therapeutic amount of the composition of the AS oligonucleotide), modulating the expression of a JNK protein in cells or tissues by contacting the cells or tissues with the AS oligonucleotide, modulating the cell cycle progression (or the phosphorylation of a protein phosphorylated by a JNK protein, or expression of a cellular protein that promotes one or more metastatic events in cultured cells or the cells of an animal) by administering the oligonucleotide to the cells, inhibiting the growth of a tumour in an animal by administering the oligonucleotide, inducing apoptosis in a cell by contacting a cell with an AS oligonucleotide for JNK2 and treating a human having a disease or condition associated with a JNK protein or characterised by a reduction in apoptosis by administering a prophylactic or therapeutic amount of the AS oligonucleotide. The antisense oligonucleotide is useful for treating a disease or condition characterised by a reduction in apoptosis, such as prostate cancer or prostate tumour, inflammation, fibrosis or fibrotic disease or condition (e.g. fibrotic scarring, peritoneal adhesions, lung fibrosis or conjunctival scarring), hyperproliferative disease or condition, such as cancer. The antisense oligonucleotides may also be used as research agents and diagnostic aids, to detect the presence of JNK protein-specific nucleic acids in a cell or tissue sample, and to study the function of one or more genes in the animal. The present sequence is a sense control oligonucleotide for antisense oligonucleotides targeting a human JNK.

Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 2.1e+02;  
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTGGCCTGGCCCG 1049

Db 1 GACTTGGCCTGGCCCG 17

RESULT 126

ADA26578/c  
ID ADA26578 standard; DNA; 20 BP.

AC ADA26578;

DT 20-NOV-2003 (first entry)

DE Human Jun N-terminal kinase, JNK2, antisense oligonucleotide IS1S12560.

ss; human; Jun N-terminal kinase; JNK1; JNK2; JNK3; antisense; cytostatic; antiinflammatory; apoptosis; prostate cancer; prostate tumour; inflammation; fibrosis; fibrotic disease; fibrotic scarring; peritoneal adhesion; lung fibrosis; conjunctival scarring; hyperproliferative disease; cancer; probe.

OS Homo sapiens.

XX Key Location/Qualifiers

FH modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Phosphorothioate linkages"

XX US2003004120-A1.

PN 02-JAN-2003.

XX 31-JAN-2001; 2001US-00774809.

XX 13-AUG-1997; 97US-00910629.

PR 07-AUG-1998; 98US-00130616.  
PR 07-APR-1999; 99US-00287796.  
PR 15-SEP-1999; 99US-00396902.

XX (MCKA//) MCKAY R.

PA (DEAN//) DEAN N M.

PA (MONI//) MONIA B P.

PA (NERO//) NERO P.

PA (GAAR//) GAARDE W A.

PI Mckay R, Dean NM, Monia BP, Nero P, Gaarde WA;

WPI; 2003-311908/30.

New oligonucleotides which hybridizes to, and modulates the expression of Jun N-terminal kinase, useful for treating a disease or condition characterized by a reduction in apoptosis, e.g. prostate cancer, inflammation or fibrosis.

Claim 25; Page 25; 69pp; English.

The invention relates to an oligonucleotide (antisense, AS) comprising 8-30 nucleotides connected by covalent linkages, where the oligonucleotide has a sequence specifically hybridisable with a nucleic acid encoding a Jun N-terminal kinase (JNK) protein and modulates the expression of the JNK protein. Also included are a pharmaceutical composition comprising the AS oligonucleotide (or its bioequivalent, and a pharmaceutical carrier), treating an animal having/suspected of having/prone to having a hyperproliferative disease (by administering to a prophylactic or therapeutic amount of the composition of the AS oligonucleotide), modulating the expression of a JNK protein in cells or tissues by contacting the cells or tissues with the AS oligonucleotide, modulating the cell cycle progression (or the phosphorylation of a protein phosphorylated by a JNK protein, or expression of a cellular protein that promotes one or more metastatic events in cultured cells or the cells of an animal) by administering the oligonucleotide to the cells, inhibiting the growth of a tumour in an animal by administering the oligonucleotide, inducing apoptosis in a cell by contacting a cell with an AS oligonucleotide for JNK2 and treating a human having a disease or condition associated with a JNK protein or characterised by a reduction in apoptosis by administering a prophylactic or therapeutic amount of the AS oligonucleotide. The antisense oligonucleotide is useful for treating a disease or condition characterised by a reduction in apoptosis, such as prostate cancer or prostate tumour, inflammation, fibrosis or fibrotic disease or condition (e.g. fibrotic scarring, peritoneal adhesions, lung fibrosis or conjunctival scarring), hyperproliferative disease or condition, such as cancer. The antisense oligonucleotides may also be used as research agents and diagnostic aids, to detect the presence of JNK protein-specific nucleic acids in a cell or tissue sample, and to study the function of one or more genes in the animal. The present sequence is an antisense oligonucleotide targeting human JNK2.

Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 2.1e+02;

Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GACTTGGCCTGGCCCG 1049

Db 20 GACTTGGCCTGGCCCG 4

RESULT 127

ACD99615/c

ID ACD99615 standard; DNA; 20 BP.

XX ACD99615;

XX 25-SEP-2003 (first entry)

XX Immunostimulatory nucleic acid #301.

KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;  
KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;  
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;  
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.  
XX  
OS Synthetic.  
XX  
PN US2003050268-A1.  
XX  
PD 13-MAR-2003.  
XX  
PF 29-MAR-2002; 2002US-00112653.  
XX  
PR 29-MAR-2001; 2001US-0279642P.  
XX  
PA (KRIE/) KRIEG A M.  
PA (BERG/) BERG D J.  
XX  
PI Krieg AM, Berg DJ;  
XX  
DR WPI; 2003-521815/49.  
XX  
PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,  
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel  
PT disease by administering an immunostimulatory nucleic acid.  
XX  
PS Disclosure; Page 16; 229pp; English.  
XX  
CC The invention describes a method of treating non-allergic inflammatory  
CC disease comprising administering to a subject having or at risk of  
CC developing a non-allergic inflammatory disease an immunostimulatory  
CC nucleic acid for prevention or treatment of the disease. The method is  
CC useful for treating non-allergic inflammatory diseases, such as  
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or  
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.  
CC This sequence represents an immunostimulatory nucleic acid  
XX  
SQ Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;  
  
Query Match 1.0%; Score 17; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 2.1e+02;  
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1033 GACTTTGGCCTGGCCG 1049  
DB 20 GACTTTGGCCTGGCCG 4  
  
RESULT 128  
ADB36685/C  
ID ADB36685 standard; DNA; 20 BP.  
XX  
AC ADB36685;  
XX  
DT 04-DEC-2003 (first entry)  
XX  
DE Immunostimulatory nucleic acid #299.  
XX  
DS; allergy; asthma; poly-G nucleic acid; aerosol formulation;  
KW hypo-responsive subject; immunostimulatory.  
XX  
OS Synthetic.  
XX  
PN US2003087848-A1.  
XX  
PD 08-MAY-2003.  
XX  
PF 02-FEB-2001; 2001US-00776479.  
XX  
PR 03-FEB-2000; 2000US-0179991P.  
XX  
PA (BRAT/) BRATZLER R L.  
PA (PETE/) PETERSEN D M.

PA (FOUR/) FOURON Y.  
XX  
PI Bratzler RL, Petersen DM, Fouron Y;  
XX  
DR WPI; 2003-657977/62.  
XX  
PT Treating and/or preventing allergy or asthma using an immunostimulatory  
XX nucleic acid alone or in combination with an asthma/allergy medicament.  
XX  
PS Disclosure; Page 9; 221pp; English.  
XX  
CC The invention relates to a method of treating or preventing allergy or  
CC asthma which comprises administering to a subject a poly-G nucleic acid  
CC in an aerosol formulation. The methods and compositions of the present  
CC invention are useful for diagnosing and/or treating asthma and allergy  
CC especially in a hypo-responsive subject. The present sequence represents  
CC an immunostimulatory nucleic acid of the invention.  
XX  
SQ Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;  
  
Query Match 1.0%; Score 17; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 2.1e+02;  
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1033 GACTTTGGCCTGGCCG 1049  
DB 20 GACTTTGGCCTGGCCG 4  
  
RESULT 129  
AAZ36748/C  
ID AAZ36748 standard; DNA; 25 BP.  
XX  
AC AAZ36748;  
XX  
DT 13-MAR-2000 (first entry)  
XX  
DE PCR primer used to amplify GenBank accession number H27389.  
XX  
KW Stimulus-regulated nucleic acid; sequence profile; nucleic acid level;  
KW differentially expressed nucleic acid; disease state; cancer;  
KW autoimmune disease; infectious disease; aging; developmental disorder;  
KW proliferative disorder; neurological disorder; toxicity; PCR primer;  
KW treatment resistance; differential expression; drug discovery;  
KW growth factor; epidermal growth factor; radiation; stress; pathogen; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO995913-A2.  
XX  
PD 04-NOV-1999.  
XX  
PF 27-APR-1999; 99WO-US009119.  
XX  
PR 27-APR-1998; 98US-0083331P.  
PR 27-AUG-1998; 98US-0098070P.  
PR 04-FEB-1999; 99US-0118624P.  
XX  
PA (KIMM-) KIMMEL CANCER CENT SIDNEY.  
XX  
PI McClelland M, Welsh J, Trenkle T;  
XX  
DR WPI; 2000-086388/07.  
XX  
PT Measuring expression of low abundance reduced complexity target nucleic  
PT acid molecules.  
XX  
PS Example 3; Page 96; 187pp; English.  
XX  
CC PCR primers Z36748-49 were used to amplify GenBank accession number  
CC H27389, for confirmation of differential analysis. The amplified sequence  
CC represents a target for the method of the invention. The specification

CC describes a method for measuring the level of two or more nucleic acid  
CC molecules in a target. The method comprises contacting a probe with an  
CC arbitrarily or statistically sampled target and detecting the amount of  
CC specific binding of the target to the probe. The methods can be used to  
CC identify differentially expressed nucleic acid molecules associated with  
CC disease states, such as cancer, autoimmune disease, infectious disease,  
CC aging, developmental disorder, proliferative disorder or neurological  
CC disorder. Alternatively the methods can be used to assess the efficacy or  
CC toxicity of or a resistance to a treatment. Also the methods can be used  
CC to determine differential expression of nucleic acid molecules in  
CC response to a stimulus, e.g. a chemical, drug or growth factor  
CC (especially epidermal growth factor), radiation, stress or a pathogen.  
CC The methods can also be used to determine co-regulated genes that can be  
CC potential targets for drug discovery  
XX  
SQ Sequence 25 BP; 5 A; 4 C; 7 G; 9 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 25;  
Best Local Similarity 80.0%; Pred. No. 2.7e+02;  
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
QY 531 CAATAGCCCATCTTTGACAAAGCC 555  
DB 25 CACTAGCAGCATCTTTGAAAGCAC 1

RESULT 130  
ADB03815  
ID ADB03815 standard; DNA; 25 BP.  
XX ADB03815;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Human MD27 scanning oligonucleotide SEQ ID 4801.  
XX  
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;  
KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;  
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
KW developmental disorder; ss.

XX Homo sapiens.  
XX  
XX EP1281758-A2.  
XX  
XX 05-FEB-2003.  
XX  
XX 30-JUL-2002; 2002EP-00016874.  
XX  
XX 02-AUG-2001; 2001US-00922181.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
XX Shannon M, Gu Y, Nguyen C;  
XX  
XX WPI; 2003-423107/40.  
XX  
XX New zinc finger-containing proteins and nucleic acids, useful in  
XX manufacturing a medicament for treating or preventing a disorder  
XX associated with decreased or increased expression or activity of MD23,  
XX MD24, MD27 or MD212, e.g. cancer.  
XX  
XX Example 8; SEQ ID NO 4801; 103pp; English.

XX The present invention relates to novel human zinc finger-containing  
XX proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is  
XX encoded at chromosome 7q22.1. MD24 is encoded at chromosome 6p21.3-22.2,  
XX MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome  
XX 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,  
XX or in manufacturing a medicament for treating or preventing a disorder  
XX associated with decreased or increased expression or activity of MD23,  
XX MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic  
XX acids and proteins are also useful for diagnosing or monitoring a disease

CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic  
CC acids can also be used as probes to detect and characterize gross  
CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are  
CC useful in constructing microarrays for measuring gene expression. The  
CC proteins are useful as therapeutic agents for gene therapy or as  
CC vaccines. The present sequence was used to illustrate the invention.  
XX  
SQ Sequence 25 BP; 0 A; 11 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 25;  
Best Local Similarity 80.0%; Pred. No. 2.7e+02;  
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
QY 922 CTGTTCCAGCTGCTCCGTGCCCTGG 946  
DB 1 CTGTTCCGCTGCCCTCGGGCTGG 25

RESULT 131  
ADB03816  
ID ADB03816 standard; DNA; 25 BP.  
XX  
XX ADB03816;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Human MD27 scanning oligonucleotide SEQ ID 4802.  
XX  
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;  
KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;  
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
KW developmental disorder; ss.  
XX  
XX Homo sapiens.  
XX  
XX EP1281758-A2.  
XX  
XX 05-FEB-2003.  
XX  
XX 30-JUL-2002; 2002EP-00016874.  
XX  
XX 02-AUG-2001; 2001US-00922181.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
XX Shannon M, Gu Y, Nguyen C;  
XX  
XX WPI; 2003-423107/40.  
XX  
XX New zinc finger-containing proteins and nucleic acids, useful in  
XX manufacturing a medicament for treating or preventing a disorder  
XX associated with decreased or increased expression or activity of MD23,  
XX MD24, MD27 or MD212, e.g. cancer.

XX Example 8; SEQ ID NO 4802; 103pp; English.  
XX  
XX The present invention relates to novel human zinc finger-containing  
XX proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is  
XX encoded at chromosome 7q22.1. MD24 is encoded at chromosome 6p21.3-22.2,  
XX MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome  
XX 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,  
XX or in manufacturing a medicament for treating or preventing a disorder  
XX associated with decreased or increased expression or activity of MD23,  
XX MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic  
XX acids and proteins are also useful for diagnosing or monitoring a disease  
XX caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic  
XX acids can also be used as probes to detect and characterize gross  
XX alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are  
XX useful in constructing microarrays for measuring gene expression. The  
XX proteins are useful as therapeutic agents for gene therapy or as  
XX vaccines. The present sequence was used to illustrate the invention.  
XX  
SQ Sequence 25 BP; 0 A; 11 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 25;  
Best Local Similarity 80.0%; Pred. No. 2.7e+02;  
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 923 TGTTCAGCTGCTCGTGGCTGGC 947  
DB 1 TGTTCAGCTGCTCGTGGCTGGC 25

RESULT 132  
AD803814  
ID ADB03814 standard; DNA; 25 BP.  
XX  
AC ADB03814;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Human MD27 scanning oligonucleotide SEQ ID 4800.  
XX  
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;  
KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;  
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
KW developmental disorder; ss.  
XX  
OS Homo sapiens.  
XX  
FN EP1281758-A2.  
XX  
PD 05-FEB-2003.  
XX  
PF 30-JUL-2002; 2002EP-00016874.  
XX  
PR 02-AUG-2001; 2001US-00922181.  
XX  
PA (AEOM-) AEOMICA INC.  
XX  
PI Shannon M, Gu Y, Nguyen C;  
XX  
DE WPI; 2003-423107/40.  
XX  
PT New zinc finger-containing proteins and nucleic acids, useful in  
PT manufacturing a medicament for treating or preventing a disorder  
PT associated with decreased or increased expression or activity of MD23,  
PT MD24, MD27 or MD212, e.g. cancer.  
XX  
PS Example 8; SEQ ID NO 4800; 103pp; English.

The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2, MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MD23, MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic acids can also be used as probes to detect and characterize gross alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.

Sequence 25 BP; 0 A; 12 C; 7 G; 6 T; 0 U; 0 Other;  
Query Match 1.0%; Score 17; DB 1; Length 25;  
Best Local Similarity 80.0%; Pred. No. 2.7e+02;  
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 921 CTTGTTCAGTGTCTCGTGGCTGC 945  
DB 1 CTTGTTCAGTGTCTCGTGGCTGC 25

RESULT 133  
ACI48161/c  
ID ACI48161 standard; DNA; 25 BP.  
XX  
AC ACI48161;  
XX  
DT 13-OCT-2003 (first entry)  
XX  
DE Human microarray DNA oligonucleotide SEQ ID NO 48152.  
XX  
KW EST; ss; probe; expressed sequence tag; microarray; gene expression;  
KW genetic variation; biallelic marker; polymorphism; human;  
KW cross-species comparison.  
XX  
OS Homo sapiens.  
XX  
FN US2003104410-A1.  
XX  
PD 05-JUN-2003.  
XX  
PF 15-MAR-2002; 2002US-00098263.  
XX  
PR 16-MAR-2001; 2001US-0276759P.  
XX  
PA (AFFY-) AFFYMETRIX INC.  
XX  
PI Mittmann MP;  
XX  
DE WPI; 2003-567953/53.  
XX

New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.  
Claim 1; SEQ ID NO 48152; 9pp; English.  
The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises hybridising at least one or more nucleic acids to at least two or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying allelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in situ hybridisation, in Southern, Northern or dot-blot hybridisation to identify or detect the sequence or specific mutations of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly from USPTO at seqdata.uspto.gov/sequence.html

Sequence 25 BP; 5 A; 2 C; 6 G; 12 T; 0 U; 0 Other;  
Query Match 1.0%; Score 17; DB 1; Length 25;  
Best Local Similarity 80.0%; Pred. No. 2.7e+02;  
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 787 AACATCGTTACGTTACATGACATTA 811  
DB 25 AATACGTCACACTACAGACATTA 1

RESULT 134  
ACK02039/c  
ID ACK02039 standard; DNA; 25 BP.

XX  
XX  
AC ACK02039;  
DT 14-OCT-2003 (first entry)

XX  
XX  
DE Human microarray DNA oligonucleotide SEQ ID NO 102020.

XX  
XX  
KW EST; ss; probe; expressed sequence tag; microarray; gene expression;  
KW genetic variation; biallelic marker; polymorphism; human;  
KW cross-species comparison.

XX  
XX  
OS Homo sapiens.

XX  
XX  
PN US2003104410-A1.

XX  
XX  
PD 05-JUN-2003.

XX  
XX  
PF 15-MAR-2002; 2002US-00098263.

XX  
XX  
PR 16-MAR-2001; 2001US-0276759P.

XX  
XX  
PA (AFFY-) AFFYMETRIX INC.

XX  
XX  
PI Mittmann MP;

XX  
XX  
DR WPI; 2003-567953/53.

XX  
XX  
PT New array of nucleic acid probes, useful for in situ hybridization, in  
PT Southern, Northern or dot-blot hybridization to identify or detect the  
PT sequence or specific mutations of any gene.

XX  
XX  
PS Claim 1; SEQ ID NO 102020; 9pp; English.

XX  
XX  
CC The invention discloses a microarray comprising a plurality of nucleic  
CC acid probes including one of 2,018,500 fully defined sequences, or its  
CC perfect match, perfect mismatch, antisense match or antisense mismatch.  
CC Also disclosed is a method of gene expression analysis. The array is used  
CC in monitoring gene expression levels by hybridisation to a DNA library,  
CC in analysis of genetic variation or in hybridisation of tag-labelled  
CC compounds. The nucleic acid probes are specifically designed for analysis  
CC of at least one target sequence. The method of analysis comprises  
CC hybridising at least one or more nucleic acids to at least two or more  
CC nucleic acid probes and detecting the hybridisation. The nucleic acid  
CC probes are attached to a solid support. The analysis comprises monitoring  
CC gene expression levels, identifying biallelic markers or polymorphisms,  
CC or family members of a gene and a cross-species comparison. Each of the  
CC nucleic acids further comprises a tag sequence. The array of nucleic acid  
CC probes is useful in situ hybridisation, in Southern, Northern or dot-  
CC blot hybridisation to identify or detect the sequence or specific  
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by  
CC primer extensions or in screening cDNA or genomic libraries or subclones  
CC for additional subclones containing segments of DNA that have been  
CC isolated and previously sequenced. The sequence presented is one of the  
CC nucleic acid probes incorporated in the microarray. Note: The sequence  
CC data for this patent can also be obtained in electronic format directly  
CC from USPTO at segdata.uspto.gov/sequence.html

XX  
XX  
SQ Sequence 25 BP; 5 A; 9 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 25;  
Best Local Similarity 80.0%; Pred. No. 2.7e+02;  
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 391 TCGATGAGGTGTCAGTCTCCAGTGA 415

DB 25 TAGATGAGGTGTCAGTCTCCAGTGA 1

RESULT 135  
ACK28727/c

ID ACK28727 standard; DNA; 25 BP.

XX  
XX  
AC ACK28727;

XX  
XX  
DT 14-OCT-2003 (first entry)

XX  
XX  
DE Human microarray DNA oligonucleotide SEQ ID NO 128708.

XX  
XX  
KW EST; ss; probe; expressed sequence tag; microarray; gene expression;  
KW genetic variation; biallelic marker; polymorphism; human;  
KW cross-species comparison.

XX  
XX  
OS Homo sapiens.

XX  
XX  
PN US2003104410-A1.

XX  
XX  
PD 05-JUN-2003.

XX  
XX  
PF 15-MAR-2002; 2002US-00098263.

XX  
XX  
PR 16-MAR-2001; 2001US-0276759P.

XX  
XX  
PA (AFFY-) AFFYMETRIX INC.

XX  
XX  
PI Mittmann MP;

XX  
XX  
DR WPI; 2003-567953/53.

XX  
XX  
PT New array of nucleic acid probes, useful for in situ hybridization, in  
PT Southern, Northern or dot-blot hybridization to identify or detect the  
PT sequence or specific mutations of any gene.

XX  
XX  
PS Claim 1; SEQ ID NO 128708; 9pp; English.

XX  
XX  
CC The invention discloses a microarray comprising a plurality of nucleic  
CC acid probes including one of 2,018,500 fully defined sequences, or its  
CC perfect match, perfect mismatch, antisense match or antisense mismatch.  
CC Also disclosed is a method of gene expression analysis. The array is used  
CC in monitoring gene expression levels by hybridisation to a DNA library,  
CC in analysis of genetic variation or in hybridisation of tag-labelled  
CC compounds. The nucleic acid probes are specifically designed for analysis  
CC of at least one target sequence. The method of analysis comprises  
CC hybridising at least one or more nucleic acids to at least two or more  
CC nucleic acid probes and detecting the hybridisation. The nucleic acid  
CC probes are attached to a solid support. The analysis comprises monitoring  
CC gene expression levels, identifying biallelic markers or polymorphisms,  
CC or family members of a gene and a cross-species comparison. Each of the  
CC nucleic acids further comprises a tag sequence. The array of nucleic acid  
CC probes is useful in situ hybridisation, in Southern, Northern or dot-  
CC blot hybridisation to identify or detect the sequence or specific  
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by  
CC primer extensions or in screening cDNA or genomic libraries or subclones  
CC for additional subclones containing segments of DNA that have been  
CC isolated and previously sequenced. The sequence presented is one of the  
CC nucleic acid probes incorporated in the microarray. Note: The sequence  
CC data for this patent can also be obtained in electronic format directly  
CC from USPTO at segdata.uspto.gov/sequence.html

XX  
XX  
SQ Sequence 25 BP; 7 A; 11 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 17; DB 1; Length 25;  
Best Local Similarity 80.0%; Pred. No. 2.7e+02;  
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 232 GGTGTGTGTGCGGCGAGTGACCCCTG 256

DB 25 GTTGTGTGTGCGGAGTGCGCCCTG 1

RESULT 136

ABA99030/c  
ID ABA99030 standard; DNA; 26 BP.

XX



Db 2 TGAAGGCGCTAAACCAACCAACAT 26

RESULT 138  
RAD62208/C  
ID AAD62208 standard; DNA; 20 BP.  
XX AC AAD62208;  
XX AC AAD62208;  
XX 15-JAN-2004 (first entry)  
XX Human haematopoietic cell tyrosine kinase antisense oligo ISIS #150763.  
XX Haematopoietic cell, tyrosine kinase; hyperproliferative disorder;  
KW cancer; therapy; inflammation; diabetes; viral infection; inflammation;  
KW tumor; cytostatic; virucide; antisense therapy; antisense; human;  
KW phosphorothioate backbone; ss.  
XX Homo sapiens.  
OS Synthetic.  
OS Synthetic.  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidines are 5-  
FT methyl cytidines"  
FT modified\_base 1..5  
FT /tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-O-methoxyethyl (2'-MOE) nucleotides"  
FT modified\_base 16..20  
FT /tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-O-methoxyethyl (2'-MOE) nucleotides"  
XX US2003125275-A1.  
XX 03-JUL-2003.  
XX 04-DEC-2001; 2001US-00007010.  
XX 04-DEC-2001; 2001US-00007010.  
XX (ISIS-) ISIS PHARM INC.  
XX Borchers AH, Dobie KW;  
XX WPI; 2003-811000/76.  
XX New antisense oligonucleotides targeted to nucleic acids encoding or  
PT haematopoietic cell protein tyrosine kinase, useful for diagnosing or  
PT treating cancer (e.g. leukemia), inflammation, diabetes or viral  
PT infections.  
XX Example 15; Page 26; 59pp; English.  
XX The invention relates to a compound targeted to a nucleic acid molecule  
CC encoding haematopoietic cell protein tyrosine kinase. The compound  
CC inhibits the expression of haematopoietic cell protein tyrosine kinase  
CC and it specifically hybridises with the nucleic acid molecule encoding  
CC the tyrosine kinase or with at least an 8-nucleobase portion of an active  
CC site on the nucleic acid molecule encoding the tyrosine kinase. The  
CC antisense compounds are useful for modulating the expression of  
CC haematopoietic cell protein tyrosine kinase and treating diseases or  
CC conditions associated with the expression of the tyrosine kinase, such as  
CC hyperproliferative disorders (e.g. cancer), inflammation, diabetes or a  
CC viral infection. The antisense compounds are also useful for diagnostics,  
CC therapeutics, prophylaxis, e.g. to prevent or delay infection,  
CC inflammation or tumour formation, as research reagents and kits and in  
CC distinguishing between functions of various members of a biological  
CC pathway. The present sequence is human haematopoietic cell tyrosine  
CC kinase antisense oligonucleotide

XX Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;  
SQ Query Match 1.0%; Score 16.8; DB 1; Length 20;  
Best Local Similarity 90.0%; Pred. No. 2.3e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 1034 ACTTGGCCTGCGCCGAGCC 1053  
Db 20 ACTTGGCCTGCGCCGAGTC 1  
RESULT 139  
AAT94989/C  
ID AAT94989 standard; DNA; 21 BP.  
XX AC AAT94989;  
XX 02-APR-1998 (first entry)  
XX Primer 3 for sequencing of human leukocyte antigen class I genes.  
DE Human leukocyte antigen-C class I gene; HLA-C; exon 1; exon 5;  
KW locus specific nucleic acid amplification; HLA typing; ss.  
XX Synthetic.  
OS Homo sapiens.  
XX WO9731126-A1.  
XX 28-AUG-1997.  
XX 20-FEB-1996; 96WO-US002408.  
XX 20-FEB-1996; 96WO-US002408.  
XX (PEKE ) PERKIN-ELMER CORP.  
XX Johnston-Dow L, Chadwick RB, Parham P;  
XX WPI; 1997-435175/40.  
XX Amplification and sequencing primers specific for HLA class I genes -  
PT useful for locus specific nucleic acid amplification for HLA typing.  
XX Claim 10; Page 57; 105pp; English.  
XX Sequencing primers AAT94987-92 were used to sequence PCR amplified human  
CC leukocyte antigen (HLA) class I genes. The primers are designed to  
CC hybridise to exon-intron borders of exons 2, 3 and 4 of the HLA genes.  
CC PCR primers were used for locus specific nucleic acid amplification for  
CC HLA typing. Typing HLA-A, -B or -C class I genes comprises providing a  
CC sample DNA containing a HLA-A, -B or -C class I gene having a 1st and 2nd  
CC exon and a target sequence, contacting the sample DNA with an  
CC amplification primer including sequence complementary to sequence located  
CC in exon 1 of the HLA-A, -B or -C gene, and a second amplification primer  
CC sequence complementary to sequence located in exon 5 of the HLA-A, -B or  
CC -C gene. The PCR product is sequenced using the above primers and the  
CC determined DNA sequence compared with the DNA sequences of known HLA  
CC types  
XX Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;  
SQ Query Match 1.0%; Score 16.8; DB 1; Length 21;  
Best Local Similarity 90.0%; Pred. No. 2.4e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 352 GGGTCTGATGGGAGAGTGA 371  
Db 21 GGGTCTGATGGGAGAGTCA 2  
RESULT 140



```

AAT95004/c
ID AAT95004 standard; DNA; 21 BP.
XX AC
XX AAT95004;
XX DT
XX 02-APR-1998 (first entry)
XX DE
XX Primer for sequencing exon 4 antisense strand of HLA class I genes.
XX KW
XX Human leukocyte antigen-C class I gene; HLA-C; exon 1; exon 5;
XX KW locus specific nucleic acid amplification; HLA typing; exon 4; ss.
XX OS
XX Synthetic.
XX OS Homo sapiens.
XX PN
XX WO9731126-A1.
XX XX
XX 28-AUG-1997.
XX XX
XX 20-FEB-1996; 96WO-US002408.
XX PF
XX 20-FEB-1996; 96WO-US002408.
XX PR
XX (PEKE ) PERKIN-ELMER CORP.
XX PA
XX Johnston-Dow L, Chadwick RB, Parham P;
XX PI
XX WPI; 1997-435175/40.
XX DR
XX Amplification and sequencing primers specific for HLA class I genes -
XX PT useful for locus specific nucleic acid amplification for HLA typing.
XX PT
XX Claim 29; Page 62; 105pp; English.
XX PS
XX The present sequencing primer was used to sequence PCR amplified human
XX CC leukocyte antigen (HLA) class I genes. The primer is designed to sequence
XX CC the antisense strand of exon 4, from the 5' exon-intron border. PCR
XX CC primers were used for locus specific nucleic acid amplification for HLA
XX CC typing. Typing HLA-A, -B or -C class I genes comprises providing a sample
XX CC DNA containing a HLA-A, -B or -C class I gene having a 1st and 2nd exon
XX CC and a target sequence, contacting the sample DNA with an amplification
XX CC primer including sequence complementary to sequence located in exon 1 of
XX CC the HLA-A, -B or -C gene, and a second amplification primer sequence
XX CC complementary to sequence located in exon 5 of the HLA-A, -B or -C gene.
XX CC The PCR product is sequenced using the above primers and the determined
XX CC DNA sequence compared with the DNA sequences of known HLA types
XX SQ
XX Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 2.4e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 352 GGGTCTGATGGGAGAGTGA 371
DB 21 GGGTCTGATGGGAGAGTGA 2
|||||
|||||

RESULT 141
AAA90553/c
ID AAA90553 standard; DNA; 21 BP.
XX AC
XX AAA90553;
XX DT
XX 11-JAN-2001 (first entry)
XX DE
XX HLA class I gene sequencing primer #3.
XX KW
XX Human Leukocyte Antigen class I; HLA-A; antigen presentation; HLA typing;
XX KW organ transplantation; autoimmune disease; sequencing primer;
XX KW infectious disease susceptibility; chromosome 6p21.3; ss.
XX OS
XX Homo sapiens.

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XX PN
XX US6103465-A.
XX XX
XX 15-AUG-2000.
XX XX
XX 03-OCT-1995; 95US-00538666.
XX PF
XX 14-FEB-1995; 95US-00390251.
XX PR
XX (PEKE ) PERKIN-ELMER CORP.
XX PA
XX Parham P, Johnston-Dow L, Chadwick RB;
XX PI
XX WPI; 2000-542544/49.
XX DR
XX Typing HLA class I genes for organ transplantation, involves contacting
XX PT the sample DNA containing HLA class I gene comprising two exons and a
XX PT target sequence, with amplification primers and detecting the amplicon.
XX PT
XX Claim 39; Col 38; 60pp; English.
XX PS
XX The present sequence is a sequencing primer for Human Leukocyte Antigen
XX CC (HLA) class I gene. The HLA class I genes are found on chromosome 6p21.3.
XX CC HLA class I proteins are found on the surface of almost all nucleated
XX CC cells and are involved in antigen presentation to immune system cells.
XX CC This primer can be used to type HLA class I genes: by carrying out PCR on
XX CC a sample DNA, comprising HLA class I gene, and detecting the amplicon
XX CC formed using a sequence-specific detection method e.g. DNA sequencing
XX CC (using the present sequence). The present sequence is useful for
XX CC discriminating among the HLA-A, HLA-B, and HLA-C genes and other related
XX CC class I genes and pseudogenes. In addition, the present sequence is
XX CC useful for organ transplantation studies, for the study of autoimmune
XX CC disease and for the determination of susceptibility to infectious disease
XX CC
XX SQ Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 2.4e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 352 GGGTCTGATGGGAGAGTGA 371
DB 21 GGGTCTGATGGGAGAGTGA 2
|||||
|||||

RESULT 142
AAA90559/c
ID AAA90559 standard; DNA; 21 BP.
XX AC
XX AAA90559;
XX DT
XX 11-JAN-2001 (first entry)
XX DE
XX HLA class I gene sequencing primer #9.
XX KW
XX Human Leukocyte Antigen class I; HLA-A; antigen presentation; HLA typing;
XX KW organ transplantation; autoimmune disease; sequencing primer;
XX KW infectious disease susceptibility; chromosome 6p21.3; ss.
XX OS
XX Homo sapiens.
XX PN
XX US6103465-A.
XX XX
XX 15-AUG-2000.
XX PD
XX 03-OCT-1995; 95US-00538666.
XX PF
XX 14-FEB-1995; 95US-00390251.
XX PR
XX (PEKE ) PERKIN-ELMER CORP.
XX PA
XX Parham P, Johnston-Dow L, Chadwick RB;
XX PI
XX
XX XX

```

DR WPI; 2000-542544/49.  
XX Typing HLA class I genes for organ transplantation, involves contacting  
PT the sample DNA containing HLA class I gene comprising two exons and a  
PT target sequence, with amplification primers and detecting the amplicon.  
XX  
PS Claim 10; Col 35; 60pp; English.  
XX  
CC The present sequence is a sequencing primer for Human Leukocyte Antigen  
CC (HLA) class I gene. The HLA class I genes are found on chromosome 6p21.3.  
CC HLA class I proteins are found on the surface of almost all nucleated  
CC cells and are involved in antigen presentation to immune system cells.  
CC This primer can be used to type HLA class I genes: by carrying out PCR on  
CC a sample DNA, comprising HLA class I gene, and detecting the amplicon  
CC formed using a sequence-specific detection method e.g. DNA sequencing  
CC (using the present sequence). The present sequence is useful for  
CC discriminating among the HLA-A, HLA-B, and HLA-C genes and other related  
CC class I genes and pseudogenes. In addition, the present sequence is  
CC useful for organ transplantation studies, for the study of autoimmune  
CC disease and for the determination of susceptibility to infectious disease  
XX  
SQ Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;  
  
Query Match 1.0%; Score 16.8; DB 1; Length 21;  
Best Local Similarity 90.0%; Pred. No. 2.4e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 352 GGGTCTGATGGGAGAGTCA 371  
DB 21 GGGTCTGATGGGAGAGTCA 2  
  
RESULT 143  
AAQ62402  
ID AAQ62402 standard; DNA; 23 BP.  
XX  
AC AAQ62402;  
XX  
DT 25-MAR-2003 (revised)  
DT 18-NOV-1994 (first entry)  
XX  
DE Vector pVAC1 construction primer #8.  
XX  
KW Vector; pVAC1; pRC/RSV; leader sequence; termination signal; PCR;  
KW fusion protein; pSfi/NotI/TagI; pElB leader; human; immunoglobulin; VH1;  
KW single chain; Fv; murine antibody; retroviral; envelope; amplify;  
KW plasmid; vaccine; polymerase chain reaction; ss.  
XX  
OS Synthetic.  
XX  
PN WO9408008-A1.  
XX  
PD 14-APR-1994.  
XX  
PF 04-OCT-1993; 93WO-GB002054.  
XX  
PR 02-OCT-1992; 92GB-00020808.  
XX  
PA (MEDI-) MEDICAL RES COUNCIL.  
XX  
PI Hawkins RE, Russell SJ, Stevenson FK, Winter GP;  
XX  
DR WPI; 1994-135575/16.  
XX  
PT Modulating immune response to a disease marker - by administering a  
PT vector which expresses the disease marker to interact with the immune  
PT system.  
XX  
PS Disclosure; Page 33; 77pp; English.  
XX  
CC The sequences given in AAQ62395-449 are primers which were used in the  
CC construction of the vector pVAC1. This vector is based on the  
CC commercially available vector pRC/RSV. Leader sequences and termination

CC signals were introduced into the vector to allow for production of fusion  
CC proteins. The vector, pSfi/NotI/TagI, was modified to replace the pElB  
CC leader with the human immunoglobulin VH1 leader sequence that permits the  
CC encoding of an SfiI cloning site without modification of the amino acid  
CC sequence. This fragment was then cloned as an EcoRI/BlnI-HindIII  
CC fragment into NotI/BlnI-HindIII cut vector pRC/RSV to give pVAC1. The  
CC single chain Fv for an individual patient can be inserted within the VH1  
CC leader sequence. This plasmid when encoding a single chain murine  
CC antibody/retroviral envelope fusion protein can be used as a plasmid  
CC vaccine and it induces a strong humoral response to the antibody moiety  
CC in BALB/c mice. (Updated on 25-MAR-2003 to correct PN field.)  
XX  
SQ Sequence 23 BP; 5 A; 4 C; 10 G; 4 T; 0 U; 0 Other;  
  
Query Match 1.0%; Score 16.6; DB 1; Length 23;  
Best Local Similarity 82.6%; Pred. No. 2.9e+02;  
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1269 TGAGGAGACGTGGCCAGGATCC 1291  
DB 1 TGAGGAGAGGTGACCAGGTTCC 23  
  
RESULT 144  
AAAX23985  
ID AAAX23985 standard; DNA; 23 BP.  
XX  
AC AAAX23985;  
XX  
DT 25-JUN-1999 (first entry)  
XX  
DE Human hGT1 PCR primer 1.  
XX  
KW Polymorphic CAG repeat; hGT1; diagnosis; prognosis; schizophrenia; human;  
KW transcription factor; neuroleptic activity; affective disorder;  
KW manic depression; neurodevelopmental brain disease; detection;  
KW phenotypic variability; PCR primer; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO9915639-A1.  
XX  
PD 01-APR-1999.  
XX  
PF 18-SEP-1998; 98WO-CA000884.  
XX  
PR 19-SEP-1997; 97CA-02216057.  
XX  
PA (UWMC-) UNIV MCGILL.  
XX  
PI Rouleau GA, Joobor R, Benkelfat C;  
XX  
DR WPI; 1999-254703/21.  
XX  
PT A human GT1 gene containing a transcribed polymorphic CAG repeat, useful  
PT in the diagnosis and treatment of schizophrenia.  
XX  
PS Disclosure; Page 16; 41pp; English.  
XX  
CC This invention describes novel human GT1 (hGT1) transcription factor gene  
CC with neuroleptic activity containing a transcribed polymorphic CAG  
CC repeat. Allelic variants of the hGT1 gene CAG repeat are associated with  
CC schizophrenia, affective disorders (especially manic depression),  
CC neurodevelopmental brain diseases or with phenotypic variability, with  
CC respect to long term response to neuroleptic medication. Short (171-177  
CC bp) allelic variants of CAG repeats in the hGT1 gene, are indicative of  
CC non-severe schizophrenia and neuroleptic response in patients. Probes  
CC and/or primers designed using the hGT1 gene can be used to identify genes  
CC interacting with a biochemical pathway affected by the hGT1 gene. The  
CC identified gene role can then be evaluated in psychiatric patients.  
CC Therapeutic agents can be identified by administering the agent to a  
CC transgenic mammal (or schizophrenic patients) and evaluating the

CC prevention and/or treatment of development of schizophrenia  
XX  
SQ Sequence 23 BP; 4 A; 6 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 23;  
Best Local Similarity 82.6%; Pred. No. 2.9e+02;  
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1470 GGGGAGCGGATCCACAACTTC 1492  
|||||  
Db 1 GGGGAGCGGATCCAGAACTTC 23

## RESULT 145

AAA98718  
ID AAA98718 standard; DNA; 23 BP.  
AC AAA98718;  
XX  
XX 08-FEB-2001 (first entry)  
XX  
XX L. mexicana kinase PCR primer invPCR2.  
DE  
XX MAP-kinase-kinase; LMWK; diagnosis; treatment; leishmaniasis; disease;  
KW parasite; protozoal infection; vaccine; PCR primer; ss.  
XX  
XX Leishmania mexicana.  
OS  
XX  
XX DE9939070-A1.  
PN  
XX  
XX 28-SEP-2000.  
PD  
XX  
XX 18-AUG-1999; 99DE-01039070.  
PF  
XX  
XX 26-MAR-1999; 99DE-01013905.  
PR  
XX  
XX (PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.  
PA  
XX  
XX Wiess M;  
PI  
XX  
XX WPI; 2000-619872/60.  
DR  
XX  
XX Use of nucleic acid encoding Leishmania kinases for identifying and  
PT preparing diagnostic, preventative and therapeutic agents.  
PT  
XX  
XX Example 1.7; Page 69; 98pp; German.

XX This invention describes a novel use of nucleic acid (I) that encodes  
CC Leishmania kinases (II) for identification and preparation of agents for  
CC diagnosis, treatment and/or prevention of leishmaniasis. The invention  
CC also describes (a) use of (II) for identifying and producing agents for  
CC diagnosis, treatment and/or prevention of leishmaniasis; (b) antibodies  
CC (Ab) directed against (II); and (c) Leishmania mutants in which at least  
CC one gene (I) is inactivated. (II) are essential for differentiation and  
CC replication of the parasites, so are targets for development of specific  
CC inhibitors. Mutants defective in (II) induce an immune response but do  
CC not cause disease. (I) and (II) are useful for identifying and preparing  
CC agents for diagnosis, treatment and/or prevention of protozoal  
CC infections, particularly leishmaniasis. (I), (II) and (II)-specific  
CC antibodies may themselves be used for diagnosis and treatment. Leishmania  
CC mutants that are unable to express at least one (II) are useful as live  
CC vaccines

SQ Sequence 23 BP; 7 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 23;  
Best Local Similarity 82.6%; Pred. No. 2.9e+02;  
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 994 AACCTGCTCATCAGCAGGGG 1016  
|||||  
Db 1 AACCTGCTCATCAGCAGAACTGG 23

## RESULT 146

ACF05113  
ID ACF05113 standard; DNA; 23 BP.  
XX  
AC ACF05113;  
XX  
XX 06-NOV-2003 (first entry)  
DT  
XX Retroviral vector pEV731 PCR primer EV976.  
DE  
XX Vector; pEV731; immunodeficiency virus; HIV; anti-HIV; latency; PCR;  
KW primer; ss.  
XX  
XX Retrovirus.  
OS  
XX WO2003054160-A2.  
PN  
XX  
XX 03-JUL-2003.  
PD  
XX  
XX 18-DEC-2002; 2002WO-US040698.  
PF  
XX  
XX 19-DEC-2001; 2001US-0341727P.  
PR  
XX (REGC ) UNIV CALIFORNIA.  
PA  
XX Verdin E, Jordan A;  
PI  
XX WPI; 2003-577369/54.  
DR  
XX  
XX Novel isolated cells that comprise transcription competent  
PT immunodeficiency virus e.g. HIV-1, or immunodeficiency virus-based  
PT retroviral vector integrated into its genome, useful for identifying  
PT latent HIV activators.

XX Example 1; Page 32; 71pp; English.

XX The present sequence is that of primer EV976, which was used with primer  
CC EVI333 (see ACF05114) in the PCR amplification of a 171 bp fragment  
CC corresponding to the 3' end of the long terminal repeats (LTR) of  
CC retroviral vector pEV731. The amplified fragment was used as a probe for  
CC genomic DNA extracted from Jurkat cells infected with viral particles  
CC containing the HIV-derived vector LTR-Tat-IRES-GFP. The invention  
CC provides isolated cells that harbour a latent immunodeficiency virus that  
CC is transcription competent, that can be reactivated, and that is an in  
CC vitro model for latent HIV infection in vivo. The cells are useful for  
CC investigating the nature of latency, and also in drug screening assays to  
CC identify agents that activate latent HIV. Such agents are useful for  
CC reducing the reservoir of latent HIV

SQ Sequence 23 BP; 8 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 23;  
Best Local Similarity 82.6%; Pred. No. 2.9e+02;  
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1051 GCCAAGTCAATCCCAACAAAGAC.1073  
|||||  
Db 1 GCTAATTCACCTCCCAACGAAGAC 23

## RESULT 147

AAA07024  
ID AAA07024 standard; DNA; 24 BP.  
XX  
XX AAA07024;  
XX  
XX 03-JUL-2000 (first entry)  
DT  
XX KSR PCR primer, SEQ ID NO:21.  
DE  
XX KSR; kinase suppressor of ras; CAP kinase; phosphorylation;  
KW ceramide-activated protein kinase; lipopolysaccharide; LPS; endotoxin;



PR 11-JUN-2001; 2001US-0297414P.  
PR 12-JUN-2001; 2001US-0295573P.  
PR 13-JUN-2001; 2001US-0297567P.  
PR 14-JUN-2001; 2001US-0298285P.  
PR 15-JUN-2001; 2001US-0298528P.  
PR 18-JUN-2001; 2001US-0299133P.  
PR 19-JUN-2001; 2001US-0299230P.  
PR 21-JUN-2001; 2001US-0299949P.  
PR 22-JUN-2001; 2001US-0300177P.  
PR 26-JUN-2001; 2001US-0300883P.  
PR 28-JUN-2001; 2001US-0301530P.  
PR 28-JUN-2001; 2001US-0301500P.  
PR 03-JUL-2001; 2001US-0302951P.  
PR 31-JUL-2001; 2001US-0308890P.  
PR 14-SEP-2001; 2001US-0322297P.  
PR 23-SEP-2001; 2001US-0324669P.  
PR 03-DEC-2001; 2001US-0337477P.  
PR 14-DEC-2001; 2001US-0341562P.  
PR 21-FEB-2002; 2002US-0358656P.  
PR 21-FEB-2002; 2002US-0359122P.  
PR 22-FEB-2002; 2002US-0358978P.  
PR 22-FEB-2002; 2002US-0359034P.  
PR 22-FEB-2002; 2002US-0359035P.  
PR 22-FEB-2002; 2002US-0359121P.  
PR 27-FEB-2002; 2002US-0359964P.  
PR 01-MAR-2002; 2002US-0360858P.  
PR 12-MAR-2002; 2002US-0363430P.  
PR 12-MAR-2002; 2002US-0363430P.  
PR 10-APR-2002; 2002US-0363676P.  
PR 10-APR-2002; 2002US-0371346P.  
PR 10-MAY-2002; 2002US-0379444P.  
PR 04-JUN-2002; 2002US-00379444.  
XX PA (CURA-) CURAGEN CORP.

(CURA-) CURAGEN CORP.

PI Agee ML, Anderson DW, Berghs C, Casman SJ, Catterton E;  
PI DiPippo VA, Edinger SR, Eisen A, Ellerman K, Gangolli EA;  
PI Gierlach NV, Gorman L, Guo X, Herrmann JL, Hjalt T, Ji W, Kekuda R;  
PI Khramtsov NL, Li L, Liu X, Malyankar UN, Miller CE, Millet I;  
PI Ort T, Padigaru M, Patturajan M, Pena CEA, Rastelli L, Rieger DK;  
PI Rothenberg ME, Shenoy SG, Shinkets RA, Smithson G, Spaderna SK;  
PI Sytek KA, Stone DJ, Vernet CAM, Zhong H, Zhong M, Alsobrook JP;  
PI Burgess CE, Lepley DM;  
XX WPI; 2003-210149/20.

XX New isolated NOVX polypeptides and nucleic acid molecules useful for  
XX treating, preventing and diagnosing pathological conditions with NOVX-  
XX associated disorders, such as cancer, obesity, diabetes and inflammatory  
XX or CNS diseases.

XX Example B; SEQ ID NO 537; 772pp; English.

XX The invention relates to novel isolated polypeptides, mature form of the  
XX polypeptide, a sequence that is 95% identical to the polypeptide or the  
XX polypeptide comprising one or more conservative substitutions. The NOVX  
XX polypeptide is useful for treating or preventing a pathology associated  
XX with the polypeptide e.g. disorders associated with aberrant expression  
XX or activity of the polypeptide, such as cancer, diabetes, obesity, and  
XX endocrine, CNS and inflammatory disorders. They can also be used in  
XX various detection and screening assays, chromosome mapping, tissue typing  
XX and predictive medicine. This sequence corresponds to a primer used to  
XX amplify and isolate the coding sequence for one of the polypeptides of  
XX the invention.

XX Sequence 24 BP; 10 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 24;  
Best Local Similarity 82.6%; Pred. No. 3.1e+02;  
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 959 GGACAGAGGTCTACACCGGAC 981  
Db 1 GGAAGAGGTGATTCACAGAGAC 23

RESULT 150

AAD60939

ID AAD60939 standard; DNA; 24 BP.

XX AC AAD60939;

XX 15-JAN-2004 (first entry)

XX BB1015 PCR primer used to isolate human SNORF7 receptor cDNA.

XX Human; SNORF7; receptor; PCR; primer; ss; inflammation;

XX autoimmune disease; neurological disorder.

XX Homo sapiens.

XX US2003109695-A1.

XX 12-JUN-2003.

XX 06-NOV-2002; 2002US-00289743.

XX 22-FEB-1999; 99US-00253999.

XX 17-AUG-1999; 99US-00375926.

XX 31-JUL-2000; 2000US-00629609.

XX (BORO/) BOROWSKY B E.

XX (KYAW/) KYAW H. A.

XX (BONI/) BONINI J A.

XX Borowsky BE, Kyaw H, Bonini JA;

XX WPI; 2003-801282/75.

XX New recombinant nucleic acid encoding a mammalian SNORF7 receptor for use  
XX as a probe and for expressing SNORF7 receptor in transfected cells.  
XX Disclosure; Page 3; Opp; English.

XX The invention relates to mammalian SNORF7 receptors and to nucleic acid  
XX molecules encoding such receptors. Polynucleotides of the invention are  
XX used as probes to obtain homologous nucleic acids from other species and  
XX to detect the existence of nucleic acids having complementary sequences  
XX in samples. They are also used to express SNORF7 receptor in transfected  
XX cells. The receptors are also used to design drugs for treating such  
XX diseases as inflammation, autoimmune diseases and neurological disorders.  
XX The present sequence is a PCR primer used to identify and isolate human  
XX SNORF7 receptor cDNA

XX Sequence 24 BP; 5 A; 8 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 24;

Best Local Similarity 82.6%; Pred. No. 3.1e+02;

Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 951 CTCGCCACCGGACAGGTCTAC 973

Db 2 CTACCACTCCAGAGGTCTGC 24

RESULT 151

AAH39887/C

ID AAH39887 standard; DNA; 25 BP.

XX AC AAH39887;

XX 14-AUG-2001 (first entry)

XX SNP specific SNPE primer SEQ ID 2683.

XX Single nucleotide polymorphism; SNP; single nucleotide primer extension;  
XX SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;

KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;  
KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;  
KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;  
KW inflammation; forensic investigation; paternity analysis; primer; ss.

OS Homo sapiens.

PN WO200129262-A2.

XX 26-APR-2001.

PD 13-OCT-2000; 2000WO-US028436.

PF 15-OCT-1999; 99US-0160096P.

PR (ORCH-) ORCHID BIOSCIENCES INC.

XX Picoult-Newburg L, Pohl M;

XX WPI; 2001-290930/30.

XX New genotyping oligonucleotide, useful for detecting the presence,  
PT absence or identity of single polynucleotide polymorphism in a nucleic  
PT acid sample.

PS Claim 1; Page 63; 83pp; English.

XX Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide  
CC primer extension (SNPE) primers, and the sequences of regions flanking  
CC sites of single nucleotide polymorphisms SNPs. The present invention  
CC includes kits for determining the presence or absence of a SNP, using the  
CC oligonucleotides of the invention. The PCR primers are used to amplify a  
CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.  
CC The oligonucleotides are useful for genotyping a nucleic acid sample by  
CC performing a single-nucleotide primer extension reaction. The  
CC oligonucleotides are useful for determining the presence, absence or  
CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to  
CC assess by association analysis the genotype of an individual or group of  
CC individuals, having a pathological phenotypic trait suspected of being  
CC caused by one or more SNPs. Phenotypic traits include diseases e.g.  
CC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular  
CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,  
CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic  
CC traits also include symptoms of or susceptibility to multifactorial  
CC disease of which a component is or may be genetic such as autoimmune  
CC diseases, including, rheumatoid arthritis, multiple sclerosis,  
CC inflammation, cancer, nervous system diseases and infection by pathogenic  
CC microorganism. The method is also useful in forensic investigations and  
CC paternity analysis. The present sequence represents a single nucleotide  
CC primer extension (SNPE) primer specific for a human SNP containing DNA  
CC sequence

XX Sequence 25 BP; 6 A; 9 C; 3 G; 7 T; 0 U; 0 Other;

SQ Query Match 1.0%; Score 16.6; DB 1; Length 25;

XX Best Local Similarity 82.6%; Pred. No. 3.2e+02;

XX Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 874 CTGGATGACTGTGGACATCAT 896

DB 24 CTGGGTGACTGAGGGAACAAT 2

RESULT 152

ABN15301

ID ABN15301 standard; DNA; 25 BP.

XX AC ABN15301;

XX 29-MAY-2002 (first entry)

XX Human GDMLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:15293.

XX

KW

KW

KW

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PA

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XX

Human; genome-derived myosin-like protein 1; GDMLP-1; heart;  
muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
skeletal muscle disorder; ampiclon; screening; ss.

OS Homo sapiens.

PN WO200192524-A2.

XX 06-DEC-2001.

PD 25-MAY-2001; 2001WO-US016981.

PF 26-MAY-2000; 2000US-0207456P.

PR 21-SEP-2000; 2000US-0234687P.

PR 27-SEP-2000; 2000US-0236359P.

PR 04-OCT-2000; 2000GB-00024263.

PR 30-JAN-2001; 2001WO-US000661.

PR 30-JAN-2001; 2001WO-US000662.

PR 30-JAN-2001; 2001WO-US000663.

PR 30-JAN-2001; 2001WO-US000664.

PR 30-JAN-2001; 2001WO-US000665.

PR 30-JAN-2001; 2001WO-US000666.

PR 30-JAN-2001; 2001WO-US000667.

PR 30-JAN-2001; 2001WO-US000668.

PR 30-JAN-2001; 2001WO-US000669.

PR 05-FEB-2001; 2001WO-US000670.

XX 05-FEB-2001; 2001US-0266860P.

XX (ABOM-) ABOMICA INC.

XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;

XX WPI; 2002-179445/23.

XX New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.

XX Disclosure; SEQ ID NO 15293; 214pp; English.

XX The present invention describes a human genome-derived myosin-like  
protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1  
can be used in gene therapy and vaccine production. The hGDMLP-1  
nucleic acids can be used as probes to detect, characterize and quantify  
hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
provide initial substrates for the recombinant engineering of hGDMLP-1  
protein variants having desired phenotypic improvements, and for  
expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
used as immunogens to raise antibodies that specifically recognise hGDMLP-1  
proteins, as standards in assays used to determine the concentration  
and/or amount specifically of hGDMLP proteins, as specific biomolecule  
capture probes for surface-enhanced laser desorption/ionisation, as  
therapeutic supplement in patients having specific deficiency in hGDMLP-1  
production, and in vaccines or for replacement therapy. The  
polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
disorder associated with the expression of hGDMLP-1, in particular heart  
and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
The present sequence represents an oligomer used in the screening of the  
hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
The sequence data for this patent did not form part of the printed  
specification, but was obtained in electronic format directly from WIPO  
at ftp.wipo.int/pub/published\_pct\_sequence

XX Sequence 25 BP; 2 A; 11 C; 5 G; 7 T; 0 U; 0 Other;

XX Query Match 1.0%; Score 16.6; DB 1; Length 25;

XX Best Local Similarity 82.8%; Pred. No. 3.2e+02;

XX Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 555 CCTCAGCCGCCGCTCGTGTG 577

DB 3 CCTCATCTCGGCTCCATGTG 25

RESULT 153  
ABN15305  
ID ABN15305 standard; DNA; 25 BP.  
XX AC ABN15305;  
XX 29-MAY-2002 (first entry)  
DT DT  
DE Human GDMPLP-1 25-mer scanning SEQ ID NO:15297.  
XX  
KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200192524-A2.  
XX  
PD 06-DEC-2001.  
XX  
XX 25-MAY-2001; 2001WO-US016981.  
XX  
PR 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-0266860P.  
XX  
PA (AEOM-) AEOMICA INC.  
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX WPI; 2002-179446/23.  
DR  
XX  
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
XX  
XX Disclosure; SEQ ID NO 15297; 214pp; English.  
XX  
XX The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption/ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMPLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence

XX  
SQ Sequence 25 BP; 2 A; 11 C; 4 G; 8 T; 0 U; 0 Other;  
Query Match 1.0%; Score 16.6; DB 1; Length 25;  
Best Local Similarity 82.6%; Pred. No. 3.2e+02;  
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 557 TCAGCGCGCGCTCCGTCGTCGTC 579  
DB 1 TCATCTCCCGCTCCATCGTCGTC 23  
RESULT 154  
ABV82333/c  
ID ABV82333 standard; DNA; 25 BP.  
XX AC ABV82333;  
XX  
XX 03-JAN-2003 (first entry)  
DT  
DE Human HTPL scanning oligonucleotide SEQ ID 3579.  
XX  
KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;  
KW human testis expressed Patched like protein; testis; adrenal; liver;  
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;  
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.  
XX  
OS Homo sapiens.  
XX  
PN EPI229046-A2.  
XX  
PD 07-AUG-2002.  
XX  
XX 28-JAN-2002; 2002EP-00001167.  
XX  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 23-MAY-2001; 2001US-00864761.  
PR 09-OCT-2001; 2001US-0327898P.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
PI Zhan J;  
XX  
XX WPI; 2002-676582/73.  
DR  
XX  
XX Novel isolated human testis expressed Patched like protein (HTPL), useful  
PT for identifying agonist and antagonist and specific binding partners, and  
PT for treating subjects having defects in HTPL.  
XX  
XX Example 2; Page 533; 718pp; English.  
XX  
XX The present invention relates to human testis expressed Patched like  
CC protein (HTPL, see ABV78759 to ABV78762 and ABV98519 to ABV98520). HTPL  
CC has two isoforms, with a few single base pair differences between the  
CC two. One of the single base pair changes introduces a premature stop  
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL  
CC shares an overall structure organisation with the Patched protein. The  
CC shared structural features strongly imply that HTPL plays a role similar  
CC to that of Patched, and is a potential tumour suppressor. HTPL is  
CC important in regulating male germ cell development, and the HTPL gene was  
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are  
CC useful for diagnosing a disorder caused by mutation in HTPL, and in  
CC therapy and manufacture of a medicament for treatment or prevention of  
CC such disorder associated with decreased expression or activity of human  
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and  
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,  
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are  
CC clinically useful diagnostic markers and potential therapeutic agents for

|            |   |
|------------|---|
| CC         | skeletal muscle or colon function. HTPJ proteins and nucleic acids are clinically useful diagnostic markers and potential therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention   |
| XX         |   |
| SQ         | Sequence 25 BP; 7 A; 10 C; 2 G; 6 T; 0 U; 0 Other;  |
|            |   |
|            | Query Match            1.0%; Score 16.6; DB 1; Length 25;   |
|            | Best Local Similarity   82.6%; Pred. NO. 3.2e+02;   |
|            | Matches   19; Conservative   0; Mismatches   4; Indels   0; Gaps   0;   |
| QY         | 216 AGGCCTGATGAGAGTGGTG 238<br>   |
| DB         | 23 AGCCAGAGTTAGTGTG 1   |
|            |   |
| RESULT 156 |   |
| ABS75865   |   |
| ID         | ABS75865 standard; DNA; 25 BP.  |
| XX         |   |
| AC         | ABS75865;   |
| XX         |   |
| DT         | 27-DEC-2002 (first entry)   |
| XX         |   |
| DE         | Human PAPP-Ea associated 25-mer SEQ ID 1391.  |
| KW         | PAPP-E; human; pregnancy associated plasma protein E; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; dysgenetic pregnancy; primer; ss.  |
| XX         |   |
| OS         | Homo sapiens.   |
| XX         |   |
| PN         | US2002102252-A1.  |
| PD         | 01-AUG-2002.  |
| XX         |   |
| FF         | 06-APR-2001; 2001US-00827998.   |
| XX         |   |
| PR         | 26-MAY-2000; 2000US-0207456P.   |
| PA         | (GUIY/) GU Y.   |
| PA         | (SHAN/) SHANNON M E.  |
| PI         | Gu Y, Shannon ME;   |
| XX         |   |
| DR         | WPI; 2002-697817/75.  |
| PT         | New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnancy.   |
| PS         | Example 2; Page 258; 353pp; English.  |
| XX         |   |
| CC         | This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, hPAPP-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention |
| XX         |   |
| SQ         | Sequence 25 BP; 10 A; 4 C; 9 G; 2 T; 0 U; 0 Other;  |
|            |   |
|            | Query Match            1.0%; Score 16.6; DB 1; Length 25;   |
|            | Best Local Similarity   82.6%; Pred. No. 3.2e+02;   |
|            | Matches   19; Conservative   0; Mismatches   4; Indels   0; Gaps   0;   |
| OY         | 1005 CAACGAGCGGAGAGCTCAAGC 1027   |





PF 15-MAR-2002; 2002US-00098263.  
XX  
PR 16-MAR-2001; 2001US-0276759P.  
XX  
XX (AFFY-) AFFYMETRIX INC.  
PA  
XX Mittmann MP;  
PI  
XX WPI; 2003-567953/53.  
XX  
XX New array of nucleic acid probes, useful for in situ hybridization, in  
PT Southern, Northern or dot-blot hybridization to identify or detect the  
PT sequence or specific mutations of any gene.  
XX  
PS Claim 1; SEQ ID NO 91054; 9pp; English.  
XX  
XX The invention discloses a microarray comprising a plurality of nucleic  
CC acid probes including one of 2,018,500 fully defined sequences, or its  
CC perfect match, antisense match or antisense mismatch.  
CC Also disclosed is a method of gene expression analysis. The array is used  
CC in monitoring gene expression levels by hybridisation to a DNA library,  
CC in analysis of genetic variation or in hybridisation of tag-labelled  
CC compounds. The nucleic acid probes are specifically designed for analysis  
CC of at least one target sequence. The method of analysis comprises  
CC hybridising at least one or more nucleic acids to at least two or more  
CC nucleic acid probes and detecting the hybridisation. The nucleic acid  
CC probes are attached to a solid support. The analysis comprises monitoring  
CC gene expression levels, identifying biallelic markers or polymorphisms,  
CC or family members of a gene and a cross-species comparison. Each of the  
CC nucleic acids further comprises a tag sequence. The array of nucleic acid  
CC probes is useful in situ hybridisation, in Southern, Northern or dot-  
CC blot hybridisation to identify or detect the sequence or specific  
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by  
CC primer extensions or in screening cDNA or genomic libraries or subclones  
CC for additional subclones containing segments of DNA that have been  
CC isolated and previously sequenced. The sequence presented is one of the  
CC nucleic acid probes incorporated in the microarray. Note: The sequence  
CC data for this patent can also be obtained in electronic format directly  
CC from USPTO at [seqdata.uspto.gov/sequence.html](http://seqdata.uspto.gov/sequence.html)  
XX  
SQ Sequence 25 BP; 6 A; 4 C; 9 G; 6 T; 0 U; 0 Other;  
Query Match 1.0%; Score 16.6; DB 1; Length 25;  
Best Local Similarity 82.6%; Pred. No. 3.2e+02;  
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1469 TGGGGGAGCGGATCCACAACTT 1491  
XX |||||  
DB 2 TGGTGATCGGATCCAGAGCTT 24  
XX  
RESULT 160  
ACI47780/c  
ID ACI47780 standard; DNA; 25 BP.  
XX  
XX ACI47780;  
AC  
XX  
XX 13-OCT-2003 (first entry)  
DE  
XX Human microarray DNA oligonucleotide SEQ ID NO 47771.  
DE  
XX EST; ss; probe; expressed sequence tag; microarray; gene expression;  
XX genetic variation; biallelic marker; polymorphism; human;  
XX cross-species comparison.  
XX  
XX Homo sapiens.  
OS  
XX US2003104410-A1.  
XX  
XX 05-JUN-2003.  
XX  
XX 15-MAR-2002; 2002US-00098263.  
XX  
XX

PR 16-MAR-2001; 2001US-0276759P.  
XX  
XX (AFFY-) AFFYMETRIX INC.  
XX  
XX Mittmann MP;  
PI  
XX WPI; 2003-567953/53.  
XX  
XX New array of nucleic acid probes, useful for in situ hybridization, in  
PT Southern, Northern or dot-blot hybridization to identify or detect the  
PT sequence or specific mutations of any gene.  
XX  
PS Claim 1; SEQ ID NO 47771; 9pp; English.  
XX  
XX The invention discloses a microarray comprising a plurality of nucleic  
CC acid probes including one of 2,018,500 fully defined sequences, or its  
CC perfect match, antisense match or antisense mismatch.  
CC Also disclosed is a method of gene expression analysis. The array is used  
CC in monitoring gene expression levels by hybridisation to a DNA library,  
CC in analysis of genetic variation or in hybridisation of tag-labelled  
CC compounds. The nucleic acid probes are specifically designed for analysis  
CC of at least one target sequence. The method of analysis comprises  
CC hybridising at least one or more nucleic acids to at least two or more  
CC nucleic acid probes and detecting the hybridisation. The nucleic acid  
CC probes are attached to a solid support. The analysis comprises monitoring  
CC gene expression levels, identifying biallelic markers or polymorphisms,  
CC or family members of a gene and a cross-species comparison. Each of the  
CC nucleic acids further comprises a tag sequence. The array of nucleic acid  
CC probes is useful in situ hybridisation, in Southern, Northern or dot-  
CC blot hybridisation to identify or detect the sequence or specific  
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by  
CC primer extensions or in screening cDNA or genomic libraries or subclones  
CC for additional subclones containing segments of DNA that have been  
CC isolated and previously sequenced. The sequence presented is one of the  
CC nucleic acid probes incorporated in the microarray. Note: The sequence  
CC data for this patent can also be obtained in electronic format directly  
CC from USPTO at [seqdata.uspto.gov/sequence.html](http://seqdata.uspto.gov/sequence.html)  
XX  
SQ Sequence 25 BP; 6 A; 4 C; 8 G; 7 T; 0 U; 0 Other;  
Query Match 1.0%; Score 16.6; DB 1; Length 25;  
Best Local Similarity 82.6%; Pred. No. 3.2e+02;  
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 815 ACACGAGAGAGTCCCTCACCCCTT 837  
XX |||||  
DB 24 AAACAGAGAGGTCTCTCACCCCTT 2  
XX  
RESULT 161  
ACI51208/c  
ID ACI51208 standard; DNA; 25 BP.  
XX  
XX ACI51208;  
AC  
XX  
XX 13-OCT-2003 (first entry)  
DE  
XX Human microarray DNA oligonucleotide SEQ ID NO 51199.  
DE  
XX EST; ss; probe; expressed sequence tag; microarray; gene expression;  
XX genetic variation; biallelic marker; polymorphism; human;  
XX cross-species comparison.  
XX  
XX Homo sapiens.  
OS  
XX US2003104410-A1.  
XX  
XX 05-JUN-2003.  
XX  
XX 15-MAR-2002; 2002US-00098263.  
XX  
XX 16-MAR-2001; 2001US-0276759P.  
XX  
XX

(AFFY-) AFFYMETRIX INC.

Mittmann MP;

WPI; 2003-567953/53.

New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.

Claim 1; SEQ ID NO 51199; 9pp; English.

The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises hybridising at least one or more nucleic acids to at least two or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying allelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dot-blot hybridisation to identify or detect the sequence or specific mutations of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly from USPTO at [seqdata.uspto.gov/sequence.html](http://seqdata.uspto.gov/sequence.html)

Sequence 25 BP; 4 A; 8 C; 11 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 25;

Best Local Similarity 82.6%; Pred. No. 3.2e+02;

Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 555 CCTAGCGCGCGCTTCGTCGTG 577

DB 24 CCCCAGCGCGCTTCGTCGTG 2

RESULT 162

ACHG2897/c

ID ACHG2897 standard; DNA; 25 BP.

XX AC ACHG2897;

XX DT 17-OCT-2003 (first entry)

XX DE DNA target sequence #12033 useful in array for genetic analyses.

XX KW Gene expression analysis; array; hybridisation; genetic variation; tag-labelled compound; gene family; in situ hybridisation; library screening; Southern hybridisation; Northern hybridisation; dot-blot hybridisation; gene sequence; mutation detection; target sequence; probe; PCR; primer; ss.

XX OS Unidentified.

XX PN US2003082596-A1.

XX PD 01-MAY-2003.

XX PF 08-AUG-2002; 2002US-00215112.

XX PR 08-AUG-2001; 2001US-0311040P.

(MITT/) MITTMANN M.

Mittmann M;

WPI; 2003-576608/54.

New probe array useful e.g. for monitoring gene expression levels, for analysing genetic variations, or for hybridizing tag-labeled compounds, comprises multiple nucleic acid probes.

Claim 1; SEQ ID NO 12033; 9pp; English.

The present invention relates to nucleic acid sequences that are complementary to particular genes, and can be used as probes for a variety of analyses such as gene expression analysis. Each probe comprises 9 or more consecutive nucleotides from at least one of 14936 nucleotide sequences defined in the patent, or their perfect sense match, sense mismatch, antisense match or antisense mismatch oligonucleotides. The probes may be used in an array comprising at least 10 distinct nucleic acid probes. The array is useful in monitoring gene expression levels by hybridisation to a DNA library, in analysing genetic variations, and in hybridising tag-labelled compounds. The probes are useful for identifying family members of a gene. The probes are also useful in in situ hybridisations, in screening cDNA or genomic libraries (or derived subclones) for additional clones containing segments of DNA that have been previously isolated and sequenced, in Southern, Northern, or dot-blot hybridisation of genomic DNA to identify or detect the sequence of any gene or detect specific mutations in any gene, and in mapping the 5' termini of mRNA molecules by primer extensions. The nucleic acid sequences of the invention are also useful as PCR primers. The invention provides a large collection of nucleic acid sequences complementary to particular genes with a wide range of analytical uses. ACH50865-ACH65260 represent the target sequences of the invention. Note: The sequence data for this patent was obtained in electronic format directly from the USPTO web site at [seqdata.uspto.gov/psipdEntry.html](http://seqdata.uspto.gov/psipdEntry.html)

Sequence 25 BP; 6 A; 5 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 1.0%; Score 16.6; DB 1; Length 25;

Best Local Similarity 82.6%; Pred. No. 3.2e+02;

Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1136 ACTACTCCACTCAGATGACATG 1158

DB 25 ACTACCACTCAGTGTGACATG 3

RESULT 163

AAV60744/c

ID AAV60744 standard; DNA; 18 BP.

XX AC AAV60744;

XX DT 08-DEC-1998 (first entry)

XX DE Primer #2 for human CDK4 codons 1-163.

XX KW PCR primer; amplification; yeast; UAS; upstream activating sequence; transcription terminator; cell cycle; Upstream Activation Sequence; UAS; promoter; phosphorylation; cyclin; cyclin-dependent kinase; CDK; vector; cyclin kinase inhibitor; CKI; growth; wound healing; cancer therapy; ss.

XX OS Synthetic.

XX OS Homo sapiens.

XX PN WO9816660-A1.

XX PD 23-APR-1998.

XX PF 16-OCT-1997; 97WO-US018608.

XX PR 16-OCT-1996; 96US-0029127P.

XX PR 27-NOV-1996; 96US-0031968P.

XX (BITT-) BITTECH INC.  
XX Bitter GA;  
XX WPI; 1998-251302/22.  
XX Screening for agents that effect cell cycle regulatory proteins - using a  
PT cell line that expresses a reporter gene in response to regulation  
PT through phosphorylation by a cyclin/CDK system.  
XX Example 4; Page 75; 93pp; English.  
XX Primers AAV60743-V60745 were used to PCR amplify codons 1-163 of the  
CC human cyclin-dependent kinase 4 (hCDK4). The amplified product was used  
CC to generate a fusion protein comprising part of the hCDK4 sequence linked  
CC to codons 154-302 of the yeast PHO85 gene. The fusion protein is used to  
CC screen for compounds that affect mammalian cell cycle regulatory  
CC proteins. The method comprises administering a compound to a cell line,  
CC which contains a reporter gene linked to an Upstream Activation Sequence  
CC (UAS) and a promoter, where the UAS binds a transcription control factor  
CC (TCF) which is regulated through cyclin/cyclin-dependent kinase (CDK)  
CC phosphorylation. Also included in the construct is an effector gene  
CC providing a gene product to permit normal cyclin/CDK regulation of the  
CC TCF. Expression of the reporter gene is then analysed in the cell line,  
CC thereby determining whether the compound affects the normal regulation.  
CC The method can be used to identify inhibitors and activators of mammalian  
CC cell cycle regulatory proteins, especially inhibitors and activators of  
CC cyclins, CDKs, cyclin/CDK complexes, cyclin kinase inhibitors (CKIs), and  
CC cyclin/CDK/CKI complexes. The identified agents can be used for  
CC stimulating growth of cells (as in wound healing), or regulating  
CC excessive cell growth and division (as in cancer therapy)  
XX Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;  
XX Query Match 0.9%; Score 16.4; DB 1; Length 18;  
XX Best Local Similarity 94.4%; Pred. No. 2.5e-02;  
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
OY 1033 GACTTTGGCTGCGCCGA 1050  
DB 18 GACTTTGGCTGCGCCAGA 1  
RESULT 164  
AAA82762  
ID AAA82762 standard; DNA; 19 BP.  
XX AAA82762;  
XX 04-DEC-2000 (first entry)  
XX cdk3 ribozyme binding site #47.  
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX Mammalia.  
XX WO200032765-A2.  
XX 08-JUN-2000.  
XX 06-DEC-1999; 99WO-US028772.  
XX 04-DEC-1998; 98US-0110954P.  
XX (IMMU-) IMMUSOL INC.  
XX Tritz R, Welch PJ, Barber JR, Robbins JM;  
XX WPI; 2000-412314/35.  
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves

PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
XX PCNA and Cyclin B1.  
XX Disclosure; Page 51; 109pp; English.  
XX The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AA62415 to AA6787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;  
XX Query Match 0.9%; Score 16.4; DB 1; Length 19;  
XX Best Local Similarity 94.4%; Pred. No. 2.6e+02;  
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
OY 1029 GCCTGACTTTGGCCTGGC 1046  
DB 1 GCCTGACTTCGGCCTGGC 18  
RESULT 165  
AAH57924  
ID AAH57924 standard; DNA; 19 BP.  
XX AAH57924;  
XX 10-SEP-2001 (first entry)  
XX Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:348.  
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
XX recognition site; target; ribozyme binding site; eye disease; vulnary;  
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
XX matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
XX antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;  
XX antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
XX sickle cell retinopathy; ss.  
XX Homo sapiens.  
XX Synthetic.  
XX WO200130362-A2.  
XX 03-MAY-2001.  
XX 26-OCT-2000; 2000WO-US029500.  
XX 26-OCT-1999; 99US-0161532P.  
XX (IMMU-) IMMUSOL INC.  
XX Robbins JM, Tritz R;  
XX WPI; 2001-300427/31.  
XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
PT that cleave RNA encoding cytokines involved in inflammation, matrix  
PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
XX Example 1; Page 97; 408pp; English.  
XX The present invention describes a method for treating a proliferative  
XX skin or eye disease and scarring. The method involves administering a  
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle

CC dependent kinase, growth factor or a reductase, or administering a  
CC nucleic acid molecule (II) comprising a promoter operably linked to a  
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,  
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
CC ophthalmological, vulnerary, keratolytic and virucide activities, and  
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic  
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention

XX Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.4; DB 1; Length 19;  
Best Local Similarity 94.4%; Pred. No. 2.6e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1029 GGCTGACTTTGGCTGGC 1046

DB 1 GGCTGACTTTGGCTGGC 18

RESULT 166

AAZ18127

ID AAZ18127 standard; DNA; 20 BP.

XX AAZ18127;

AC AAZ18127;

XX AAZ18127;

DT 11-OCT-1999 (first entry)

XX STK 3 gene specific primer.

DE Genetic proximity; gene expression; cell characterisation; homeobox gene;  
KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;  
KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;  
KW primer; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9934016-A2.

PN WO9934016-A2.

XX 08-JUL-1999.

PD 28-DEC-1998; 98WO-IL000625.

PF 29-DEC-1997; 97IL-00122793.

XX 16-OCT-1998; 98IL-00126627.

PR (GENE-) GENENA LTD.

XX Vider B;

XX WPI; 1999-419113/35.

DR P-PSDB; AAY14662.

XX Identifying and characterizing cells by comparing the pattern of gene

PT expression in a selected gene family.

XX Claim 4; Page 44; 102pp; English.

XX The invention provides a new method for identifying and characterising

CC cells. The method for determining the genetic proximity of a first cell

CC and a second cell comprises: (a) obtaining the first cell and the second

CC cell; (b) determining in the first cell and the second cell the pattern

CC of expression of genes in a selected gene family; and (c) calculating a

CC proximity index using a specified formula. The methods can be used for

CC characterising cells, e.g. for determining the origin of a cell, its

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CC genetic status, whether it carries a genetic defect, or whether it is  
CC transformed. They can be used for detecting a selected genetic defect in  
CC an individual, e.g. a fetus. They can also be used for determining the  
CC effect of a selected treatment on a test cell. They can also be used for  
CC obtaining cells capable of expressing an homeobox related desired  
CC property. The method uses reverse transcriptase polymerase chain reaction  
CC (RT-PCR) for determining the pattern of gene expression in a selected  
CC gene family. Sequences AAZ17803-218342 represent primers that can be used  
CC in the RT-PCR reactions to determine the pattern of gene expression. The  
CC gene family can be selected from a set of homeobox genes, kinase genes,  
CC protein phosphatase genes, P450 enzyme genes, steroid receptor  
CC superfamily genes or cadherin superfamily genes

XX Sequence 20 BP; 8 A; 9 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.4; DB 1; Length 20;

Best Local Similarity 94.4%; Pred. No. 2.8e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 972 ACACCGAGACTCAAGCC 989

DB 3 ACACCGAGACTCAAGCC 20

RESULT 167

AAZ18155

ID AAZ18155 standard; DNA; 20 BP.

XX AAZ18155;

AC AAZ18155;

XX AAZ18155;

DT 11-OCT-1999 (first entry)

XX STK 17 gene specific primer.

DE Genetic proximity; gene expression; cell characterisation; homeobox gene;  
KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;  
KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;  
KW primer; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9934016-A2.

PN WO9934016-A2.

XX 08-JUL-1999.

PD 28-DEC-1998; 98WO-IL000625.

PF 29-DEC-1997; 97IL-00122793.

XX 16-OCT-1998; 98IL-00126627.

PR (GENE-) GENENA LTD.

XX Vider B;

XX WPI; 1999-419113/35.

DR P-PSDB; AAY14690.

XX Identifying and characterizing cells by comparing the pattern of gene

PT expression in a selected gene family.

XX Claim 4; Page 45; 102pp; English.

XX The invention provides a new method for identifying and characterising

CC cells. The method for determining the genetic proximity of a first cell

CC and a second cell comprises: (a) obtaining the first cell and the second

CC cell; (b) determining in the first cell and the second cell the pattern

CC of expression of genes in a selected gene family; and (c) calculating a

CC proximity index using a specified formula. The methods can be used for

CC characterising cells, e.g. for determining the origin of a cell, its

CC genetic status, whether it carries a genetic defect, or whether it is

CC transformed. They can be used for detecting a selected genetic defect in

CC an individual, e.g. a fetus. They can also be used for determining the

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CC effect of a selected treatment on a test cell. They can also be used for  
 CC obtaining cells capable of expressing an homeobox related desired  
 CC property. The method uses reverse transcriptase polymerase chain reaction  
 CC (RT-PCR) for determining the pattern of gene expression in a selected  
 CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used  
 CC in the RT-PCR reactions to determine the pattern of gene expression. The  
 CC gene family can be selected from a set of homeobox genes, kinase genes,  
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor  
 CC superfamily genes or cadherin superfamily genes  
 XX Sequence 20 BP; 8 A; 9 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.4; DB 1; Length 20;  
 Best Local Similarity 94.4%; Pred. No. 2.8e+02;  
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 972 ACACCGAGACCTCAAGCC 989  
 Db 3 ACACCGAGACCTCAAAAC 20

## RESULT 168

AAZ18141  
 ID AAZ18141 standard; DNA; 20 BP.

XX AC  
 AC AAZ18141;

XX 11-OCT-1999 (first entry)

XX STK 10 gene specific primer.

XX Genetic proximity; gene expression; cell characterisation; homeobox gene;  
 KW Genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;  
 KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;  
 KW primer; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9934016-A2.

XX 08-JUL-1999.

XX 28-DEC-1998; 98WO-IL000625.

XX 29-DEC-1997; 97IL-00122793.

PR 16-OCT-1998; 98IL-00126627.

XX (GENE-) GENENA LTD.

XX Vider B;

XX WPI; 1999-419113/35.

DR P-PSDB; AAY14676.

XX Identifying and characterizing cells by comparing the pattern of gene  
 PT expression in a selected gene family.

XX Claim 4; Page 44; 102pp; English.

XX The invention provides a new method for identifying and characterizing  
 CC cells. The method for determining the genetic proximity of a first cell  
 CC and a second cell comprises: (a) obtaining the first cell and the second  
 CC cell; (b) determining in the first cell and the second cell the pattern  
 CC of expression of genes in a selected gene family; and (c) calculating a  
 CC proximity index using a specified formula. The methods can be used for  
 CC characterizing cells, e.g. for determining the origin of a cell, its  
 CC genetic status, whether it carries a genetic defect, or whether it is  
 CC transformed. They can be used for detecting a selected genetic defect in  
 CC an individual, e.g. a fetus. They can also be used for determining the  
 CC effect of a selected treatment on a test cell. They can also be used for  
 CC obtaining cells capable of expressing an homeobox related desired  
 CC property. The method uses reverse transcriptase polymerase chain reaction

CC (RT-PCR) for determining the pattern of gene expression in a selected  
 CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used  
 CC in the RT-PCR reactions to determine the pattern of gene expression. The  
 CC gene family can be selected from a set of homeobox genes, kinase genes,  
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor  
 CC superfamily genes or cadherin superfamily genes  
 XX Sequence 20 BP; 8 A; 9 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.4; DB 1; Length 20;  
 Best Local Similarity 94.4%; Pred. No. 2.8e+02;  
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 972 ACACCGAGACCTCAAGCC 989  
 Db 3 ACACCGAGACCTCAAAAC 20

## RESULT 169

AB293276/c

ID AB293276 standard; DNA; 20 BP.

XX AC  
 AC AB293276;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

OS WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.

XX Disclosure; SEQ ID NO 8518; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also  
 CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 6 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.4; DB 1; Length 20;  
Best Local Similarity 94.4%; Pred. No. 2.8e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1087 GTGGTGACACTGTGTAC 1104  
DB |||||

DB 20 GTGGTGACACTGTGTGC 3

RESULT 170  
AAD30434  
ID AAD30434 standard; DNA; 24 BP.

XX AAD30434;

XX 21-MAY-2002 (first entry)

XX Human androgen receptor (AR) gene exon 1 amplifying primer #3.

XX Human; AIB1; amplified in breast cancer 1; androgen receptor; AR;  
XX prostate cancer; exon 1; PCR primer; ss.

XX Homo sapiens.

XX WO200210452-A2.

XX 07-FEB-2002.

XX 27-JUL-2001; 2001WO-US023834.

XX 27-JUL-2000; 2000US-0221074P.

XX (UYRP ) UNIV ROCHESTER.

XX Chang C;

XX WPI; 2002-206195/26.

XX Assessing the risk of acquiring or developing prostate cancer in a human  
XX subject, comprises determining the length of the contiguous CAG, CAA  
XX and/or GGN repeats in the AIB1 gene and/or androgen receptor gene of the  
XX subject.

XX Claim 39; Page 42; 86pp; English.

XX The invention relates to a method for assessing the risk of prostate  
XX cancer in a human subject. The method involves determining the length of  
XX the contiguous CAG or CAA repeats in both AIB1 (Amplified In Breast  
XX cancer 1) gene alleles or contiguous CAG, CAA or GGN repeats in the  
XX androgen receptor gene of the subject. The method is useful for assessing  
XX a subject's risk for acquiring or developing prostate cancer. The present  
XX sequence is a PCR primer used to amplify human androgen receptor (AR)  
XX gene exon 1 and is used in the molecular analysis and assessment of the  
XX GGN repeat of AR gene

XX Sequence 24 BP; 3 A; 13 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.4; DB 1; Length 24;  
Best Local Similarity 94.4%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 554 CCTCAGCGCGCCCTCC 571

DB 2 CCTCAGCGCGCCCTCC 19

RESULT 171  
ACI40315/C

ID ACI40315 standard; DNA; 25 BP.

XX ACI40315;

XX 13-OCT-2003 (first entry)

XX Human microarray DNA oligonucleotide SEQ ID NO 40306.

XX EST; ss; probe; expressed sequence tag; microarray; gene expression;  
XX genetic variation; biallelic marker; polymorphism; human;  
XX cross-species comparison.

XX Homo sapiens.

XX US2003104410-A1.

XX 05-JUN-2003.

XX 15-MAR-2002; 2002US-00098263.

XX 16-MAR-2001; 2001US-0276759P.

XX (AFFY-) AFFYMETRIX INC.

XX Mittmann MP;

XX WPI; 2003-567953/53.

XX New array of nucleic acid probes, useful for in situ hybridization, in  
XX Southern, Northern or dot-blot hybridization to identify or detect the  
XX sequence or specific mutations of any gene.

XX Claim 1; SEQ ID NO 40306; 9pp; English.

XX The invention discloses a microarray comprising a plurality of nucleic  
XX acid probes including one of 2,018,500 fully defined sequences, or its  
XX perfect match, perfect mismatch, antisense match or antisense mismatch.  
XX Also disclosed is a method of gene expression analysis. The array is used  
XX in monitoring gene expression levels by hybridisation to a DNA library,  
XX in analysis of genetic variation or in hybridisation of tag-labelled  
XX compounds. The nucleic acid probes are specifically designed for analysis  
XX of at least one target sequence. The method of analysis comprises  
XX hybridising at least one or more nucleic acids to at least two or more  
XX nucleic acid probes and detecting the hybridisation. The nucleic acid  
XX probes are attached to a solid support. The analysis comprises monitoring  
XX gene expression levels, identifying biallelic markers or polymorphisms,  
XX or family members of a gene and a cross-species comparison. Each of the  
XX nucleic acids further comprises a tag sequence. The array of nucleic acid  
XX probes is useful in situ hybridisation, in Southern, Northern or dot-  
XX blot hybridisation to identify or detect the sequence or specific  
XX mutations of any gene, in mapping the 5' termini of mRNA molecules by  
XX primer extensions or in screening cDNA or genomic libraries or subclones  
XX for additional subclones containing segments of DNA that have been  
XX isolated and previously sequenced. The sequence presented is one of the  
XX nucleic acid probes incorporated in the microarray. Note: The sequence  
XX data for this patent can also be obtained in electronic format directly  
XX from USPTO at seqdata.uspto.gov/sequence.html

XX Sequence 25 BP; 2 A; 8 C; 7 G; 8 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.4; DB 1; Length 25;

Best Local Similarity 94.4%; Pred. No. 3.5e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 977 GAGACCTCAAGCCCCAGA 994

DB 18 GAGACCTCTAGCCCCAGA 1

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RESULT 172
AAS11083
ID AAS11083 standard; DNA; 21 BP.
XX
AC AAS11083;
XX
DT 24-OCT-2001 (first entry)
XX
DE Bacterial 16S RNA antisense oligomer #49.
XX
XX Antisense; bacterial 16S ribosomal RNA; rRNA; bacterial infection; human;
KW food grain supplement; livestock; poultry; therapeutic; ss.
XX
OS Streptococcus pneumoniae.
XX
XX WO200142457-A2.
XX
XX 14-JUN-2001.
XX
XX 29-NOV-2000; 2000WO-US042391.
FF
XX
PR 29-NOV-1999; 99US-0168150F.
XX
XX (AVIB-) AVI BIOPHARMA INC.
PA
PI Iversen PL;
XX
DR WPI; 2001-457295/49.
XX
XX Antibacterial compound, useful for treating bacterial infections and as
PT livestock and poultry food supplement, comprises antisense
PT oligonucleotides complementary to bacterial 16S and 23S rRNA.
XX
XX Disclosure; Page 28; 62pp; English.
XX
XX AAS11035-AAS11157 represent the coding sequences of bacterial 16S
CC ribosomal RNA (rRNA) antisense oligomers. These sequences are
CC antibacterial compounds comprising substantially uncharged antisense
CC oligomers containing 8-40 nucleotide subunits, including a targeting
CC nucleic acid sequence at least 10 nucleotides in length which is
CC complementary to a bacterial 16S or 23S rRNA nucleic acid sequence. The
CC antisense oligomers are used for treating a bacterial infection in a
CC human or a mammalian animal produced by Escherichia coli, Salmonella
CC typhimurium, Pseudomonas aeruginosa, Vibrio cholera, Neisseria
CC gonorrhoea, Helicobacter pylori, Bartonella henselae, Haemophilus
CC influenza, Shigella dysenteriae, Staphylococcus aureus, Mycobacterium
CC tuberculosis, Streptococcus pneumoniae, Treponema pallidum and Chlamydia
CC trachomatis. The antibacterial compound may be used as a food grain
XX supplement in livestock and poultry food composition
XX
SQ Sequence 21 BP; 6 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 3.2e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1439 ATGCCATGAACATCCATTCT 1459
Db 1 ATGTGATGAACATCCACTCT 21

RESULT 173
ABK99296/C
ID ABK99296 standard; RNA; 21 BP.
XX
AC ABK99296;
XX
XX 21-OCT-2002 (first entry)
DT
DE Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #26.
XX
XX Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.
XX

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OS Synthetic.
XX
XX US2002064771-A1.
XX
XX 30-MAY-2002.
XX
XX 06-APR-2001; 2001US-00828034.
FF
XX
PR 07-APR-2000; 2000US-0195852P.
XX
XX (ZHON/) ZHONG W.
PA (HONG/) HONG Z.
PA (FERR/) FERRARI E.
XX
XX Zhong W, Hong Z, Ferrari E;
PI
XX WPI; 2002-582330/62.
XX
XX Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3
PT nucleotide-long template to which a 2 nucleotide-long primer is annealed,
PT and template and primer which do not form a stable duplex in the absence
XX of HCV NS5B.
XX
XX Example; Page 6; 17pp; English.
XX
XX The invention relates to a replicase complex comprising a hepatitis C
CC virus (HCV) NS5B replicase protein, a linear nucleic acid template and a
CC complementary nucleic acid primer which is annealed to the 3' terminus of
CC the template, where the template is at least three nucleotides and the
CC primer is two or three nucleotides, and the template and primer do not
CC form a stable duplex in solution in the absence of the HCV NS5B protein.
CC The complex is useful for detecting HCV replicase activity and permits
CC establishment of sensitive RNA-dependent RNA polymerase assays to screen
CC and evaluate antiviral inhibitors and to improve the specificity and
CC efficacy of the inhibitors. The complex is also useful in the development
CC of a reliable system for determining kinetic and thermodynamic constants
CC of HCV NS5B-catalysed nucleotide incorporation and investigation of
CC mechanistic inhibitors for mis-incorporation or chain termination.
CC Specifically, the short RNA template and primer pairs are useful in
CC screening assays which are used for determining kinetic, thermodynamic
CC and mechanistic properties of NS5B replication and ultimately in the
CC development of inhibitors of NS5B. Newly identified inhibitors of
CC replicase activity may be used for developing anti-HCV pharmaceuticals.
CC Sequences ABK99271-ABK99296 represent HCV NS5B replicase RNA synthesis
XX templates
XX
SQ Sequence 21 BP; 7 A; 14 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 3.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 230 GTGGTGGTGGTGGCGCAGTG 250
Db 21 GTGGTGGTGGTGGTGGTGGTG 1

RESULT 174
ABL44421
ID ABL44421 standard; DNA; 21 BP.
XX
XX ABL44421;
XX
XX 11-APR-2002 (first entry)
DT
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:1465.
XX
XX Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
KW PCR primer; ss.
XX
XX Homo sapiens.
XX
XX JP2001321190-A.
XX

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XX PD 20-NOV-2001.
XX XX
XX PF 12-MAR-2001; 2001JP-00068285.
XX XX
XX PR 10-MAR-2000; 2000JP-00066716.
XX XX
XX PA (RIKA ) RIKAGAKU KENKYUSHO.
XX PA (GENO-) GENOTEX YG.
XX XX
XX DR WPI; 2002-144136/19.
XX XX
XX PT Arraying genome clones.
XX XX
XX PS Claim 4; Page 33; 529pp; Japanese.
XX XX

The present invention describes a method of arraying genome clones. The
method comprises: (a) clones of the genomic libraries contained in
multiwell plates numbered for discrimination are mixed in each of the
multiwell plates; (b) a primer designed based on the chromosome marker
sequence is added to the mixture to carry out an amplification reaction;
(c) a signal corresponding to the marker is detected from the resultant
amplified product to specify the discrimination Nos. of the multiwell
plates containing the clones having said marker sequence; (d) the order
of the markers is changed so that the same discrimination Nos. succeed to
the maximum in the specified discrimination Nos. to array the multiwell
plates; (e) the clones in the multiwell plates of the specified
discrimination Nos. are mixed respectively in each wells of longitudinal
and lateral directions; (f) the mixed clones are cultured and the
resultant cultures are amplified by using the above primer; (g) signals
are detected from the amplified products; (h) the clones in the multiwell
plates are specified from the detected result; and (i) the clones are
reconstituted as the positions on the chromosome and arrayed. The
microarray is useful for gene analysis. ABL42957 to ABL45322 represent
PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
represent PCR primers for human chromosome 21q22.1, which are
specifically claimed for use in the present invention

XX
SQ Sequence 21 BP; 5 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 3.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1140 CTCCTCTCAGATGACATCTG 1160
DB 1 CTCCTCTCAGATGACATCTG 21

RESULT 175
ABT34114/c
XX AC ABL34114 standard; DNA; 21 BP.
XX AC ABL34114;
XX AC
XX AC
XX DT 29-MAY-2003 (first entry)
XX XX
XX DE Human pigmentation trait-related PCR primer - SEQ ID No 213.
XX DE
XX KW Human; single nucleotide polymorphism; SNP; ss; melanocortin-1 receptor;
XX KW genetic pigmentation trait; MC1R; agouti signaling protein; ASIP; race;
XX KW hair colour; eye colour; forensic tool; PCR; primer.
XX KW
XX OS Homo sapiens.
XX OS
XX PN WO200297047-A2.
XX XX
XX PD 05-DEC-2002.
XX XX
XX PF 28-MAY-2002; 2002WO-US016789.
XX XX
XX PR 25-MAY-2001; 2001US-0293560P.
XX PR 21-JUN-2001; 2001US-0300187P.
XX XX
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PR 07-AUG-2001; 2001US-0310781P.
PR 17-SEP-2001; 2001US-0323662P.
PR 26-OCT-2001; 2001US-0344418P.
PR 15-NOV-2001; 2001US-0334674P.
PR 02-JAN-2002; 2002US-0346303P.
XX XX
XX PA (DNAP-) DNAPRINT GENOMICS INC.
XX XX
XX PI Fridakis T;
XX XX
XX DR WPI; 2003-239091/23.
XX XX
XX PT Inferring genetic pigmentation trait such as hair/eye color or shade from
XX PT nucleic acid sample of human subject, by identifying a pigmentation-
XX PT related haplotype allele of a pigmentation gene in the sample.
XX XX

Example 17; Page 248; 396pp; English.
PS
XX The invention comprises a method for inferring a genetic pigmentation
XX trait of a human. The method involves identifying a single nucleotide
XX polymorphism (SNP) in a pigmentation gene - where the pigmentation gene
XX is not melanocortin-1 receptor (MC1R) and agouti signaling protein
XX (ASIP). The method of the invention is useful for inferring a genetic
XX pigmentation trait of a human, especially for inferring the race of a
XX human subject. The method is useful for inferring a genetic pigmentation
XX trait such as hair shade or colour, or eye shade or colour of a human
XX subject. The method may be used as a forensic tool for obtaining
XX information relating to physical characteristics of a potential crime
XX victim or a perpetrator of a crime from a nucleic acid sample present at
XX a crime scene. The present PCR primer is used in the exemplification of
XX the invention
XX
XX SQ Sequence 21 BP; 5 A; 8 C; 2 G; 6 T; 0 U; 0 Other;
Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 3.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 863 TGAAGCAGTACCTGGATGATG 883
DB 21 TGAAGCAGTACATGGTGAGT 1

RESULT 176
ADD14567
XX ID ADD14567 standard; DNA; 21 BP.
XX AC
XX AC ADD14567;
XX AC
XX DT 01-JAN-2004 (first entry)
XX XX
XX DE Human src biomarker reverse PCR primer SEQ ID NO:756.
XX XX
XX KW predictor set; protein tyrosine kinase activity modulator;
XX KW protein tyrosine kinase pathway; protein tyrosine kinase; cytostatic;
XX KW gene therapy; drug sensitivity; genetic profile; cancer; human;
XX KW PCR primer; ss.
XX KW
XX OS Synthetic.
XX OS
XX OS Homo sapiens.
XX OS
XX PN WO2003062395-A2.
XX XX
XX PD 31-JUL-2003.
XX XX
XX PF 17-JAN-2003; 2003WO-US001981.
XX XX
XX PR 18-JAN-2002; 2002US-0350061P.
XX XX
XX PA (BRIM ) BRISTOL-MYERS SQUIBB CO.
XX XX
XX PI Huang F, Fairchild CR, Lee FY, Shaw P;
XX XX
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DE WPI; 2003-636735/60.
XX
PT New polynucleotides and polypeptides for predicting the activity of
PT compounds that interact with protein tyrosine kinases and/or protein
PT tyrosine kinase pathways.
XX
PS Example 2; SEQ ID NO 756; 139pp; English.
XX
CC The present invention describes a predictor set comprising a plurality of
CC polynucleotides or polypeptides whose expression pattern is predictive of
CC the response of cells to treatment with a compound that modulates protein
CC tyrosine kinase activity or members of the protein tyrosine kinase
CC pathway. Also described: (1) predicting whether a compound is capable of
CC modulating the activity of cells, comprising obtaining a sample of cells,
CC determining whether the cells express a plurality of markers, and
CC correlating the expression of the markers to the compound's ability to
CC modulate the activity of the cells; (2) a plurality of cell lines for
CC identifying polynucleotides and polypeptides whose expression levels
CC correlate with compound sensitivity or resistance of cells associated
CC with a disease state; and (3) identifying polynucleotides and
CC polypeptides that predict compound sensitivity or resistance of cells
CC associated with a disease state, comprising subjecting the plurality of
CC cell lines to one or more compounds, analysing the expression pattern of
CC a microarray of polynucleotides or polypeptides, and selecting
CC polynucleotides or polypeptides that predict the sensitivity or
CC resistance of cells associated with a disease state by using the
CC expression pattern of the microarray. The polynucleotides and
CC polypeptides have cytostatic activities, and can be used in gene therapy.
CC The polynucleotides and polypeptides are useful in predicting the
CC activity of compounds that interact with protein tyrosine kinases and/or
CC protein tyrosine kinase pathways. These may be used in determining drug
CC sensitivity in patients to allow the development of individualized
CC genetic profiles which aid in treating diseases and disorders (e.g.
CC cancer) based on patient response at a molecular level. The present
CC sequence is used in the exemplification of the present invention.
XX
SQ Sequence 21 BP; 6 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 3.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0

QY 986 AGCCCCAGAACCTGCTCATCA 1006
Db ||| ||||| ||||| |||||
1 AGTCGAGAACCTGCTCATTA 21

RESULT 177
AAI56678/c
ID AAI56678 standard; DNA; 22 BP.
AC AAI56678;
XX
XX 07-JAN-2002 (first entry)
XX
XX Human CETP DNA related PCR primer.
XX
XX CETP; arteriosclerosis; cholesterol ester transfer protein; HDL;
XX high density lipoprotein; human; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX W0200171032-A1.
XX
XX 27-SEP-2001.
XX
XX 23-MAR-2001; 2001WO-JP002327.
XX
XX 24-MAR-2000; 2000JP-00084264.
XX
XX (BVLB-) BML INC.
XX
XX Nagano M, Ito M, Sagehashi Y, Hattori H, Egashira T, Yamashita S;

```

PI Matsuzawa Y;  
 XX  
 DR WPI; 2001-611516/70.  
 XX  
 XX  
 PT Determining a risk factor for arteriosclerosis comprises detecting  
 PT mutations in genes for cholesterol ester transfer protein.  
 XX  
 XX  
 PS Disclosure; Page 20; 59pp; Japanese.  
 XX  
 CC The invention relates to detecting the risk factor for arteriosclerosis  
 CC in a subject that involves detecting mutations in the gene for  
 CC cholesterol ester transfer protein (CEP) related to the degree of risk  
 CC of arteriosclerosis. The mutant proteins alter the level of HDL in the  
 CC blood. The high frequency mutations can be detected for prevention and  
 CC treatment of arteriosclerosis. Sequences AA16685-91 represent PCR  
 CC primers related to the human CEP DNA, used during the course of the  
 CC invention  
 XX  
 XX Sequence 22 BP; 5 A; 12 C; 2 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.9%; Score 16.2; DB 1; Length 22;  
 Best Local Similarity 85.7%; Pred No. 3.3e+02;  
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 232 GGTGGTGGTGGCGGCACTGAC 252  
 |||||  
 DB 22 GGTGGTGGTGGCGGCACTGAC 2  
 |||||  
 RESULT 178  
 ABZ99041/C  
 ID ABZ99041 standard; DNA; 22 BP.  
 XX  
 AC ABZ99041;  
 XX  
 XX DT 17-OCT-2003 (first entry)  
 XX  
 DE Human PDE4A-MTA oligonucleotide sequence.  
 XX  
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antinflammatory; antiallergic;  
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.  
 XX  
 OS Homo sapiens.  
 OS  
 XX  
 XX WO200285308-A2.  
 PN  
 XX  
 PD 31-OCT-2002.  
 XX  
 XX 23-APR-2002; 2002WO-US013135.  
 PF  
 XX  
 XX 24-APR-2001; 2001US-0286137P.  
 PR  
 XX  
 XX (EPIG-) EPIGENESIS PHARM INC.  
 PA  
 XX  
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 XX  
 XX WPI; 2003-229219/22.  
 DR  
 XX  
 PT Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.  
 XX  
 XX Disclosure; SEQ ID NO 14283; 872pp; English.  
 PS  
 XX  
 CC The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also  
 CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;  
 SQ

Query Match 0.9%; Score 16.2; DB 1; Length 22;  
 Best Local Similarity 85.7%; Pred. No. 3.3e+02;  
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 535 AGCCCCATCTTGACAAAGCC 555  
 DB 22 AGCCCCATCTTGACAAAGCC 2

RESULT 179  
 AAA64536/c

ID AAA64536 standard; DNA; 23 BP.  
 AC AAA64536;  
 XX  
 XX 02-JAN-2001 (first entry)  
 DT  
 XX  
 DE PCR primer G6 used to amplify exon 2 of human FEZ1 gene.  
 XX  
 XX Human; FEZ1 gene; tumour suppressor gene; 8p22; cancer; tumour growth;  
 KW tumour proliferation; tubulin; microtubule; protein Efi-gamma;  
 KW tubulin polymerisation disorder; mitosis initiation; cell proliferation;  
 KW cell growth; cell shape; cell rigidity; cell motility; DNA replication;  
 KW tumorigenesis; tumour survival; metastasis; PCR primer; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO2000050565-A2.  
 PN  
 XX 31-AUG-2000.  
 PD  
 XX 25-FEB-2000; 2000WO-US004950.  
 PF  
 XX 25-FEB-1999; 99US-0121537P.  
 PR  
 XX (UYJE-) UNIV JEFFERSON THOMAS.  
 PA  
 XX Croce CM, Ishii H;  
 PI  
 XX WPI; 2000-558396/51.  
 DR  
 XX New polynucleotide homologous with a portion of one strand of the human  
 PT FEZ1 gene, useful for alleviating abnormal cell proliferation such as  
 PT cancer.  
 PS  
 XX Example 1; Page 45; 255pp; English.  
 CC  
 CC PCR primers AAA64535-36 were used to amplify a fragment of the human FEZ1  
 CC gene. FEZ1 is a tumour suppressor gene, located at chromosome location  
 CC 8p22. Decreased or no expression of FEZ1 is detected in a variety of  
 CC cancer cells. Expression of FEZ1 inhibits tumour growth and  
 CC proliferation. FEZ1 also interacts with tubulin, with microtubules, and  
 CC with protein Efi-gamma. Post-translational phosphorylation and

CC dephosphorylation modulates the effect of the FEZ1 protein. Inhibitors of  
 CC FEZ1 gene expression are useful for inducing cells to proliferate.  
 CC Compounds which modulate FEZ1 association with tubulin are useful for  
 CC alleviating tubulin hyper- or hypo- polymerisation disorders, such as  
 CC those associated with aberrant initiation of mitosis, modulation of the  
 CC initiation and rate of cell proliferation and cell growth, modulation of  
 CC cell shape, cell rigidity, cell motility, rate and stage of cellular DNA  
 CC replication, intracellular distribution of organelles, metastatic  
 CC potential of cell and cellular transformation from a non-cancerous to  
 CC cancerous phenotype. Compounds which modulate FEZ1 binding and  
 CC phosphorylation are also useful for alleviating a disorder, such as  
 CC tumorigenesis, tumour survival, growth and metastasis  
 XX  
 XX Sequence 23 BP; 3 A; 8 C; 7 G; 5 T; 0 U; 0 Other;  
 SQ

Query Match 0.9%; Score 16.2; DB 1; Length 23;  
 Best Local Similarity 85.7%; Pred. No. 3.5e+02;  
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 850 CTGGAGAGGAGGACCTGAAGCAG 870  
 DB 23 CTGGAGAGGAGGACCTGAAGCAG 3

RESULT 180  
 ABA82542

ID ABA82542 standard; DNA; 24 BP.  
 XX  
 XX ABA82542;  
 AC  
 XX 25-JAN-2002 (first entry)  
 DT  
 XX  
 DE Zmax1 gene region physical map preparation STS marker #501.  
 XX  
 XX Human; high bone mass; HBM gene; Zmax1 gene; chromosome 11; 11q13.3;  
 KW sequence tagged site; STS; osteoporosis; osteopathic; gene therapy;  
 KW antisense therapy; vaccine; bone disorder; Paget's disease; adapter;  
 KW sclerostosis; osteomalacia; fibrous dysplasia; PCR primer; linker; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX Synthetic.  
 OS  
 XX WO200177327-A1.  
 PN  
 XX 18-OCT-2001.  
 PD  
 XX 21-JUN-2000; 2000WO-US016951.  
 PF  
 XX 05-APR-2000; 2000US-00543771.  
 PR  
 XX 05-APR-2000; 2000US-00544398.  
 PD  
 XX (GENO-) GENOME THERAPEUTICS CORP.  
 PA  
 XX Carulli JP, Little RD, Recker RR, Johnson ML;  
 PI  
 XX WPI; 2001-657171/75.  
 DR  
 XX New high bone mass (HBM) and Zmax1 genes and proteins useful for  
 PT modulating bone mass for the treatment of e.g. osteoporosis.  
 PT  
 XX Disclosure; Page 37; 443pp; English.  
 PS  
 XX The present invention describes the human Zmax1 gene and the high bone  
 CC mass (HBM) gene, which are found on chromosome 11q13.3. The Zmax1 and HBM  
 CC genes have osteopathic activities. The genes can be used in gene therapy,  
 CC antisense therapy and in the production of vaccines. They can be used in  
 CC the diagnosis and treatment of bone disorders including osteoporosis,  
 CC Paget's disease, sclerostosis, osteomalacia and fibrous dysplasia.  
 CC ABA82038 to ABA82700 and AAG68168 to AAG68193 represent sequences used in  
 CC the exemplification of the present invention  
 CC  
 XX Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;  
 SQ

```
Query Match      0.9%; Score 16.2; DB 1; Length 24;
Best Local Similarity 85.7%; Pred. No. 3.7e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 862 CTGAAGCAGTACTCGTGTGAC 882
Db 1 CTGAACCACTACTCTGTATGAC 21

RESULT 181
ABS55758/c
ID ABS55758 standard; DNA; 24 BP.
XX
AC ABS55758;
XX
DT 22-JAN-2003 (first entry)
XX
DE Human p70 ribosome S6 kinase 26.29 RT-PCR primer #1.
XX
KW Human p70 ribosome S6 kinase 26.29; human; malignant tumour;
KW inflammation; immunological disease; haemopathy;
KW HIV human immunodeficiency virus; reverse transcriptase PCR; RT-PCR;
KW primer; ss.
XX
OS Homo sapiens.
XX
PN CN1347994-A.
XX
PD 08-MAY-2002.
XX
PF 11-OCT-2000; 2000CN-00125684.
XX
PR 11-OCT-2000; 2000CN-00125684.
XX
PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
PI Mao Y, Xie Y;
XX
WPI; 2002-549001/59.
XX
PT New polypeptide human p70 ribosome S6 kinase 26.29 and encoding
PT polynucleotides for treating malignant tumors, inflammations,
PT immunological diseases, hemopathy and human immunodeficiency virus
PT infection.
XX
PS Example 2; Page 17 (Disclosure); 34pp; Chinese.
XX
CC The present invention discloses one new kind of polypeptide, human p70
CC ribosome S6 kinase 26.29, polynucleotides encoding this polypeptide and
CC DNA recombination process to produce the polypeptide. The present
CC invention also discloses the method of applying the polypeptide in
CC treating various diseases, such as malignant tumours, inflammations,
CC immunological diseases, haemopathy and human immunodeficiency virus
CC infection (HIV). The present invention also discloses the antagonist
CC resisting the polypeptide and its treatment effect, and the application
CC of the polynucleotides encoding human p70 ribosome S6 kinase 26.29. This
CC sequence represents a reverse transcriptase PCR primer used to isolate
CC cDNA encoding the human p70 ribosome S6 kinase 26.29
XX
SQ Sequence 24 BP; 4 A; 7 C; 11 G; 2 T; 0 U; 0 Other;

Query Match      0.9%; Score 16.2; DB 1; Length 24;
Best Local Similarity 85.7%; Pred. No. 3.7e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 97 GTTGTCGCGCGCCCGCGCG 117
Db 21 GCTTCTCGCGCGCTCCGCGC 1

RESULT 182
ABK23339
ID ABK23339 standard; DNA; 24 BP.
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XX ABK23339;
AC
XX
DT 09-APR-2002 (first entry)
XX
DE Human Zmax1 cDNA forward PCR primer #251.
XX
KW Human; mouse; Zmax1; HBM; high bone mass gene; lipid regulation; stroke;
KW lipid-associated condition; arteriosclerosis; cardiovascular disease; ss;
KW osteoporosis; atherosclerosis; diabetic atherosclerosis; plaque build-up;
KW neurovascular condition; wound healing; gene therapy; PCR primer; probe;
KW bone development disorder; antiarteriosclerotic; cardiovascular;
KW osteopathic; cerebroprotective.
XX
OS Homo sapiens.
XX
PN WO2001192891-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016946.
XX
PR 26-MAY-2000; 2000US-00578900.
XX
PA (GENO-) GENOME THERAPEUTICS CORP.
PA (UYCR-) UNIV CREIGHTON SCHOOL MEDICINE.
XX
PI Carulli JP, Little RD, Recker RR, Johnson ML;
XX
WPI; 2002-057784/13.
XX
PT Identifying molecules involved in lipid regulation, useful for
PT diagnosing, treating or preventing e.g., arteriosclerosis, comprises
PT identifying a molecule that binds to high bone mass gene or its
PT corresponding wild type gene.
XX
PS Disclosure; Page 42; 409pp; English.
XX
CC The invention relates to a method for identifying a molecule involved in
CC lipid regulation comprising identifying a molecule that binds to or
CC inhibits binding of a molecule to high bone mass (HBM) or its wild type
CC gene, Zmax1. Compounds identified by the method are useful for treating,
CC diagnosing, preventing or screening for normal and abnormal lipid-
CC associated conditions, including arteriosclerosis, cardiovascular
CC disease, stroke, and osteoporosis. The compounds may also be used in
CC treatment or prevention of diabetic atherosclerosis, neurovascular
CC conditions caused by plaque build-up, poor circulation due to plaque
CC build-up and associated poor wound healing. The methods may be used in
CC gene therapy, pharmaceutical development, and diagnostic assays for bone
CC development disorders. Molecules identified by comparison of Zmax1 and
CC HBM systems can be used as surrogate markers in pharmaceutical
CC development, in diagnosis of human or animal bone disease, and in the
CC treatment of bone diseases. Sequences ABK22776-ABK23411 represent cDNA
CC molecules encoding human Zmax1 and HBM, and PCR primers, probes, linkers
CC and adapters of the invention
XX
SQ Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;

Query Match      0.9%; Score 16.2; DB 1; Length 24;
Best Local Similarity 85.7%; Pred. No. 3.7e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 862 CTGAAGCAGTACTCGTGTGAC 882
Db 1 CTGAACCACTACTCTGTATGAC 21

RESULT 183
ACC45922
ID ACC45922 standard; DNA; 24 BP.
XX
AC ACC45922;
XX
```

```
DT 02-JUN-2003 (first entry)
XX Human HBM STS marker forward primer #251.
XX
XX Human; high bone mass; HBM; LRP5; LRP6; transgenic; bone mass modulation;
XX gene therapy; bone density modulation; bone strength; trabecular number;
XX bone size; bone tissue connectivity; bone disease; osteoporosis; PCR;
XX osteomalacia; rickets; Paget's disease; neoplasm of the bone; primer; ss.
XX
XX Homo sapiens.
XX
XX WO200292764-A2.
XX
XX 21-NOV-2002.
XX
XX 13-MAY-2002; 2002WO-US014876.
XX
XX 11-MAY-2001; 2001US-0290071P.
XX
XX 17-MAY-2001; 2001US-0291311P.
XX
XX 01-FEB-2002; 2002US-0353058P.
XX
XX 04-MAR-2002; 2002US-0361293P.
XX
XX (GENO-) GENOME THERAPEUTICS CORP.
XX (AMHP ) WYETH.
XX
XX Babij P, Bex FJ, Yaworsky PJ, Bodine PV;
XX
XX WPI; 2003-129278/12.
XX
XX New transgenic animals (e.g. mice), useful as models for studying bone
XX density modulation, developing drugs for treating or preventing bone
XX diseases (e.g. osteoporosis), or diagnosing diseases characterized by
XX reduced bone density.
XX
XX Disclosure; Page 58; 603pp; English.
XX
XX The invention relates to novel transgenic animals expressing the high
XX bone mass (HBM) gene, expressing the corresponding wild type HBM gene,
XX comprising an alteration of the gene encoding LRP5 or LRP6, or expressing
XX an LRP5 that is modulated by an altered gene control sequence introduced
XX by homologous or non-homologous recombination. The transgenic animals are
XX for the study of bone density modulation or bone mass modulation. The
XX invention has osteopathic and cytostatic activity. The polynucleotides of
XX the invention may have a use in gene therapy. The transgenic animals and
XX nucleic acids are for the study of bone density modulation, where the
XX bone mass is modulated relative to non-transgenic animals of the same
XX species in more than one parameter selected from bone density, bone
XX strength, trabecular number, bone size, or bone tissue connectivity. The
XX transgenic animals, nucleic acids and methods are useful for identifying
XX molecules involved in bone development, and for developing pharmaceutical
XX compositions, which may be employed for treating or preventing bone
XX diseases, e.g. osteoporosis, osteomalacia, rickets, Paget's disease, or
XX neoplasms of the bone. The transgenic animals and nucleic acids are also
XX useful in methods for diagnosing diseases involved in bone development, is
XX or characterised by reduced bone density or mass. The present sequence is
XX used in the exemplification of the invention
XX
XX Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 16.2; DB 1; Length 24;
XX Best Local Similarity 85.7%; Pred. No. 3.7e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 862 CTGAAGCAGTACTCGATGAC 882
Db 1 CTGAACCACTACTCGTATGAC 21
| | | | |
RESULT 184
AD98620
ID ADB98620 standard; DNA; 24 BP.
XX
XX ADB98620;
```

```
XX 04-DEC-2003 (first entry)
XX
XX Sequence tagged site #501 used to prepare Zmax1 (LRP5) gene region map.
XX
XX Osteopathic; Gene therapy; High Bone Mass; HBM; LRP5; Zmax1; LRP6;
XX bone mass modulation; osteoporosis; STS; sequence tagged site; ds.
XX
XX Homo sapiens.
XX
XX WO200292000-A2.
XX
XX 21-NOV-2002.
XX
XX 13-MAY-2002; 2002WO-US014877.
XX
XX 11-MAY-2001; 2001US-0290071P.
XX
XX 17-MAY-2001; 2001US-0291311P.
XX
XX 01-FEB-2002; 2002US-0353058P.
XX
XX 04-MAR-2002; 2002US-0361293P.
XX
XX (GENO-) GENOME THERAPEUTICS CORP.
XX (AMHP ) WYETH.
XX
XX Allen K, Anisowicz A, Graham JR, Morales A, Yaworsky PJ, Liu W;
XX
XX WPI; 2003-129214/12.
XX
XX New nucleic acid comprising a mutation in LRP5 or LRP6, useful for
XX diagnosing a HBM-like phenotype in a subject and for preparing a
XX composition for modulating bone mass and/or lipid levels in a subject
XX suffering from e.g. osteoporosis.
XX
XX Example 2; Page 64; 629pp; English.
XX
XX The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) and
XX LRP6 mutants, which results in a HBM-like phenotype when expressed in a
XX cell. The HBM-like phenotype results in bone mass modulation and/or lipid
XX level modulation. The invention is useful for diagnosing a HBM-like
XX phenotype in a subject and for preparing a composition for modulating
XX bone mass and/or lipid levels in a subject suffering from e.g.
XX osteoporosis. The present sequence is a sequence tagged site (STS)
XX marker, which was used to prepare a physical map of the Zmax1 (LRP5) gene
XX region.
XX
XX Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 16.2; DB 1; Length 24;
XX Best Local Similarity 85.7%; Pred. No. 3.7e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 862 CTGAAGCAGTACTCGATGAC 882
Db 1 CTGAACCACTACTCGTATGAC 21
| | | | |
RESULT 185
AAT67065/c
ID AAT67065 standard; DNA; 20 BP.
XX
XX AAT67065;
XX
XX 06-AUG-1997 (first entry)
XX
XX Soluble type I insulin-like growth factor receptor 3' PCR primer.
XX
XX Type I insulin-like growth factor receptor; IGF-IR; tumour; melanoma;
XX prostate cancer; ovary cancer; breast cancer; lung cancer;
XX smooth muscle cancer; apoptosis; gene therapy; primer; PCR;
XX polymerase chain reaction; ss.
XX
XX Synthetic.
XX
```

PN WO9718241-A1.  
XX 22-MAY-1997.  
XX 13-NOV-1996; 96WO-US018327.  
XX 14-NOV-1995; 95US-0006699P.  
XX (UYJE-) UNIV JEFFERSON THOMAS.  
XX Baserga R, Resnicoff M, Dambrosio C, Ferber A;  
XX WPI; 1997-289231/26.  
XX Soluble type I insulin-like growth factor receptor - used for inducing  
XX resistance to tumour growth in a mammal.  
XX Example 2; Page 28; 65pp; English.  
XX A PCR fragment corresponding to human soluble type I insulin- like growth  
XX factor receptor (IGF-1R) (see also AAT67063) was created using mutagenic  
XX primers. The 5' primer (AAT67064) contains an artificial BamHI site and  
XX corresponds to nucleotides 135-153. The 3' reverse primer (AAT67065)  
XX contains 2 mismatches that result in the disruption of an AgeI site. The  
XX PCR fragment was used in the construction of vector pGEX-5x-3/IFGIRsol.  
XX Soluble IGF-1R (see also AAM15282) was expressed as a GST fusion protein  
XX in E. coli B21(DE3) transformants. Soluble IGF-1R can be used in methods  
XX for inducing resistance to tumour growth in a mammal  
XX Sequence 20 BP; 2 A; 7 C; 9 G; 2 T; 0 U; 0 Other;  
Query Match 0.9%; Score 16; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 3.3e+02;  
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1100 GGTACCGGCCCTGGA 1115  
DB 16 GGTACCGGCCCTGGA 1  
RESULT 186  
AAX31942/C  
ID AAX31942 standard; DNA; 24 BP.  
AC AAX31942;  
XX 16-JUN-1999 (first entry)  
XX Primer C used in the production of UDPAG.  
XX Uridine diphosphate-N-acetylglucosamine; UDPAG; microbial; fermentation;  
XX uridine 5'-monophosphate; UMP; N-acetylglucosamine; AG kinase; drug;  
XX PCR primer; ss.  
XX Synthetic.  
XX WO9911810-A1.  
XX 11-MAR-1999.  
XX 11-AUG-1998; 98WO-JP0033561.  
XX 29-AUG-1997; 97JP-00249461.  
XX (YAMA-) YAMASA CORP.  
XX Takenouchi K, Ishige K, Midorikawa Y, Okuyama K, Hamamoto T;  
XX Noguchi T;  
XX WPI; 1999-243625/20.  
XX Microbial production of uridine diphosphate-N-acetylglucosamine.  
PS Example 6; Page 17; 38pp; Japanese.  
XX The invention relates to a process for producing Uridine diphosphate-N-  
XX acetylglucosamine (UDPAG). UDPAG is prepared by microbial fermentation  
XX from uridine 5'-monophosphate (UMP) and N-acetylglucosamine in the  
XX presence of N-acetylglucosamine kinase (AG kinase). Efficient production  
XX of UDPAG using N-acetylglucosamine as substrate. UDPAG is a key  
XX intermediate in the synthesis of oligosaccharides for use as drugs and  
XX functional materials. Sequences AAX31940 to AAX31953 represent primers  
XX used during the course of the invention  
XX Sequence 24 BP; 0 A; 4 C; 8 G; 12 T; 0 U; 0 Other;  
Query Match 0.9%; Score 16; DB 1;  
Best Local Similarity 79.2%; Pred. No. 4e+02;  
Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
QY 666 AGGCAAAAGCAAGCTCACAGCAA 689  
DB 24 ACGCACAAAGCAAGCAAAACAGCCAA 1  
RESULT 187  
ABL41245  
ID ABL41245 standard; DNA; 24 BP.  
XX ABL41245;  
XX 16-MAY-2002 (first entry)  
XX Human neuregulin 55 PCR primer SEQ ID NO 3.  
XX Human; neuregulin 55; nervous system; development; neuropsychopathy;  
XX tumour; inflammation; immunological disease; primer; ss.  
XX Homo sapiens.  
XX CN1324826-A.  
XX 05-DEC-2001.  
XX 19-MAY-2000; 2000CN-00115761.  
XX 19-MAY-2000; 2000CN-00115761.  
XX (BODE-) BODE GENE DEV CO LTD SHANGHAI.  
XX Mao Y, Xie Y;  
XX WPI; 2002-217507/28.  
XX New polypeptide human neuregulin 55 and polynucleotides for encoding  
XX same.  
XX Example 3; Page 18 (Disclosure); 35pp; Chinese.  
XX The invention relates to human neuregulin 55, polynucleotide for coding  
XX this polypeptide and a method for producing this polypeptide by using DNA  
XX recombination technique. The invention also discloses the method for  
XX curing several diseases, such as nervous system developmental diseases,  
XX neuropsychopathy, other nervous system diseases, developmental disturbance,  
XX tumours, inflammations and immunological disease by using said  
XX polypeptide. The invention also discloses an antagonist for resisting  
XX said polypeptide and its therapeutic action and also discloses the  
XX application of polynucleotide to coding this novel human neuregulin 55.  
XX The present sequence is that of a human neuregulin 55 primer, useful to  
XX the invention  
XX Sequence 24 BP; 7 A; 9 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 0.9%; Score 16; DB 1; Length 24;  
Best Local Similarity 79.2%; Pred. No. 4e+02;  
Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1321 TACCCAGTACCGAGCGAGGCC 1344  
DB 1 TACTCAGTACCGAGCGAGGCC 24

RESULT 188  
ABI83145  
ID ABI83145 standard; DNA; 24 BP.  
XX  
AC ABI83145;  
XX  
DT 15-FEB-2002 (first entry)  
XX  
DE Capture oligonucleotide Zip ID#374 oligo #2.  
XX  
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;  
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;  
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;  
KW oncogene; tumour suppressor; human papillomavirus; forensic;  
KW environmental monitoring; food industry; feed industry; ss.  
XX  
OS Synthetic.  
XX  
PN WO200179548-A2.  
XX  
PD 25-OCT-2001.  
XX  
PF 04-APR-2001; 2001WO-US010958.  
XX  
PR 14-APR-2000; 2000US-0197271P.  
XX  
PX (CORR ) CORNELL RES FOUND INC.  
PA  
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;  
XX  
XX WPI; 2002-034366/04.  
XX  
XX Designing capture oligonucleotide probes for use on a support to which  
PT complementary oligonucleotides hybridize with little mismatch.  
XX  
XX Example 5; Fig 25; 300pp; English.

The present invention describes a method (M1) for designing capture oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridize with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus as 21 hydroxylase deficiency, Turner Syndrome and obesity defects. Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to ABI97546 represent oligonucleotide sequences used in the exemplification of the present invention

Sequence 24 BP; 8 A; 6 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.9%; Score 16; DB 1; Length 24;  
Best Local Similarity 79.2%; Pred. No. 4e+02;  
Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 994 AACCTGCTCATCAACGAGGGGA 1017  
DB 1 AACGGCTCATCACAGACGGGA 24

RESULT 189  
ABI92410/c  
ID ABI92410 standard; DNA; 24 BP.  
XX  
AC ABI92410;  
XX  
DT 15-FEB-2002 (first entry)  
XX  
DE Capture oligonucleotide Zip ID#374 oligo #3.  
XX  
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;  
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;  
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;  
KW oncogene; tumour suppressor; human papillomavirus; forensic;  
KW environmental monitoring; food industry; feed industry; ss.  
XX  
OS Synthetic.  
XX  
PN WO200179548-A2.  
XX  
PD 25-OCT-2001.  
XX  
PF 04-APR-2001; 2001WO-US010958.  
XX  
PR 14-APR-2000; 2000US-0197271P.  
XX  
PX (CORR ) CORNELL RES FOUND INC.  
PA  
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;  
XX  
XX WPI; 2002-034366/04.  
XX  
XX Designing capture oligonucleotide probes for use on a support to which  
PT complementary oligonucleotides hybridize with little mismatch.  
XX  
XX Claim 3; Fig 26; 300pp; English.

The present invention describes a method (M1) for designing capture oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridize with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus as 21 hydroxylase deficiency, Turner Syndrome and obesity defects. Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to ABI97546 represent oligonucleotide sequences used in the exemplification of the present invention

Sequence 24 BP; 2 A; 8 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.9%; Score 16; DB 1; Length 24;  
Best Local Similarity 79.2%; Pred. No. 4e+02;  
Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

**Qy**

994 AACCTGCTCATCAACGAGAGCGGA 1017  
||| ||| ||| ||| ||| ||| ||| |||

**D<sub>b</sub>**

24 AACGGGCTCATCACAGAGACCGGA 1  
|||||

```

RESULT 190
ABI83144/C
ID ABI83144 standard; DNA; 24 BP.
XX
XX ABI83144;
XX AC
XX DT
15-FEB-2002 (first entry)
XX
XX
DE Capture oligonucleotide Zip ID#374 oligo #1.
XX

```

Human; K-ras; PCR primer; probe; capture probe; mutation detection; ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.

|    |                                |
|----|--------------------------------|
| OS | Synthetic.                     |
| XX |                                |
| PN | WO200179548-A2.                |
| XX |                                |
| PD | 25-OCT-2001.                   |
| XX |                                |
| PF | 04-APR-2001; 2001WO-US010958.  |
| XX |                                |
| PR | 14-APR-2000; 2000US-0197271P.  |
| XX |                                |
| PA | (CORR ) CORNELL RES FOUND INC. |

Barany F, Zirvi M, Gerry NP, Pavis R, Kliman R;  
WPI: 2002-034366/04.

XX Designing capture oligonucleotide probes for use on a support to which  
PT complementary oligonucleotides hybridize with little mismatch.  
PT

Example 5; Fig 25; 300pp; English.

The present invention describes a method (M1) for designing capture oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridize with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. *Salmonella*, *Listeria* monocytogenes and *Haemophilus influenza*, fungal infectious agents e.g. *Cryptococcus neoformans*, *Candida albicans* and *Aspergillus fumigatus*, viruses e.g. T-cell lymphocytotropic virus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from *Onchocerca volvulus*, *Entamoeba histolytica* and *Dracunculus medialis*. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BCLAL gene, p3 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. AB182074 to AB197546 represent oligonucleotide sequences used in the exemplification of the present invention

Sequence 24 BP; 2 A; 8 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.9%; Score 16; DB 1; Length 24;  
Best Local Similarity 79.2%; Pred. No. 4e+02;  
Matches 19; Conservative 0; Mismatches 5; Indels

Qy  
994 AACCTGCTCATCAACGAGAGGGGA 1017

D<sub>b</sub>  
24 AACGGGCTCATCACAGAGACGGGA 1

RESULT 191  
ABI92411  
ID ABI92411 standard; DNA; 24 BP.  
XX  
XX  
ABI92411;  
XX  
XX  
AC  
AC  
XX  
XX  
15-FEB-2002 (first entry)  
XX  
XX  
Capture oligonucleotide zip ID#374 oligo #4.

Human; K-ras; PCR primer; probe; capture probe; mutation detection; ligase detection reaction; LRR; p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.

|    |                                |
|----|--------------------------------|
| OS | Synthetic.                     |
| XX |                                |
| PN | WO200179548-A2.                |
| XX |                                |
| XX |                                |
| PD | 25-OCT-2001.                   |
| XX |                                |
| XX |                                |
| PF | 04-APR-2001; 2001WO-US010958.  |
| XX |                                |
| XX |                                |
| PR | 14-APR-2000; 2000US-0197271P.  |
| XX |                                |
| XX |                                |
| PA | (CORR ) CORNELL RES FOUND INC. |

Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;  
WPI; 2002-034366/04.

AA Designing capture oligonucleotide probes for use on a support to which  
PT complementary oligonucleotides hybridize with little mismatch.  
PT

PS Claim 3; Fig 26; 300pp; English.

The present invention describes a method (M1) for designing capture oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridise with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. *Salmonella*, *Listeria monocytogenes* and *Haemophilus influenza*, fungal infectious agents e.g. *Cryptococcus neoformans*, *Candida albicans* and *Aspergillus fumigatus*, viruses e.g. T-cell lymphocytotropic virus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from *Onchocerca volvulus*, *Entamoeba histolytica* and *Dracunculus medinensis*. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects. Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BSC1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying (if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. AB182074 to AB19546 represent oligonucleotide sequences used in the exemplification of the present invention

SQ Sequence 24 BP; 8 A; 6 C; 8 G; 2 T; 0 U; 0 Other;

```
Query Match          0.9%; Score 16; DB 1; Length 24;
Best Local Similarity 79.2%; Pred. No. 4e+02;
Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
```



QY 994 AACCTGCTCATCAACGAGAGGGGA 1017  
|||||  
Db 1 AACGGGCTCATCACAGACGGGA 24

RESULT 192  
AAA83175  
ID AAA83175 standard; DNA; 19 BP.

XX AC AAA83175;

XX DT 04-DEC-2000 (first entry)

XX DE cdk7 ribozyme binding site #96.

XX KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX OS Mammalia.

XX FN WO200032765-A2.

XX PD 08-JUN-2000.

XX PF 06-DEC-1999; 99WO-US028772.

XX PR 04-DEC-1998; 98US-0110954P.

XX PA (IMMU-) IMMUSOL INC.

XX PI Tritz R, Welch PJ, Barber JR, Robbins JM;

XX DR WPI; 2000-412314/35.

XX PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.

XX PS Disclosure; Page 57; 109pp; English.

XX CC The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment

XX SQ Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 19;  
Best Local Similarity 89.5%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1028 TGGCTGACTTTGGCTGGC 1046  
|||||  
Db 1 TGGCAGATTTGGCCTGGC 19

RESULT 193  
AAA83176  
ID AAA83176 standard; DNA; 19 BP.

XX AC AAA83176;

XX DT 04-DEC-2000 (first entry)

XX DE cdk7 ribozyme binding site #97.

XX KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX OS Mammalia.

XX PN WO200032765-A2.  
XX PD 08-JUN-2000.  
XX PF 06-DEC-1999; 99WO-US028772.  
XX PR 04-DEC-1998; 98US-0110954P.  
XX PA (IMMU-) IMMUSOL INC.  
XX PI Tritz R, Welch PJ, Barber JR, Robbins JM;  
XX DR WPI; 2000-412314/35.  
XX PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.  
XX PS Disclosure; Page 57; 109pp; English.

XX CC The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment

XX SQ Sequence 19 BP; 2 A; 5 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 19;  
Best Local Similarity 89.5%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1029 GGCTGACTTTGGCTGGCC 1047  
|||||  
Db 1 GGCAGATTTGGCCTGGCC 19

RESULT 194  
AAA84307  
ID AAA84307 standard; DNA; 19 BP.

XX AC AAA84307;

XX DT 04-DEC-2000 (first entry)

XX DE Cyclin D2 ribozyme binding site #4.

XX KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX OS Mammalia.

XX FN WO200032765-A2.

XX PD 08-JUN-2000.

XX PF 06-DEC-1999; 99WO-US028772.

XX PR 04-DEC-1998; 98US-0110954P.

XX PA (IMMU-) IMMUSOL INC.

XX PI Tritz R, Welch PJ, Barber JR, Robbins JM;

XX DR WPI; 2000-412314/35.

XX PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.

PS Disclosure; Page 75; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX

SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 19;  
Best Local Similarity 89.5%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 993 GAACCTGCTCATCAACGAG 1011

Db 1 GAACCTGCTCACCATCGAG 19

RESULT 195

AAA83174  
ID AAA83174 standard; DNA; 19 BP.

XX AAA83174;

XX 04-DEC-2000 (first entry)

XX cdk7 ribozyme binding site #95.

XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX Mammalia.

XX WO200032765-A2.

XX 08-JUN-2000.

XX 06-DEC-1999; 99WO-US028772.

XX 04-DEC-1998; 98US-0110954P.

XX (IMMU-) IMMUSOL INC.

XX Tritz R, Welch PJ, Barber JR, Robbins JM;

XX WPI; 2000-412314/35.

XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.

XX Disclosure; Page 57; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX

SQ Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 19;  
Best Local Similarity 89.5%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1027 CTGCTGACTTTGGCTGG 1045

||||| ||||| ||||| |||||

Db 1 CTGGCAGATTTTGGCTGG 19

RESULT 196

AAH59469

ID AAH59469 standard; DNA; 19 BP.

XX AAH59469;

XX 10-SEP-2001 (first entry)

XX Cyclin D2 ribozyme binding site SEQ ID NO:1893.

XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
XX recognition site; target; ribozyme binding site; eye disease; vulnery;  
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
XX matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
XX antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;  
XX antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
XX sickle cell retinopathy; ss.

XX Homo sapiens.

XX Synthetic.

XX WO200130362-A2.

XX 03-MAY-2001.

XX 26-OCT-2000; 2000WO-US029500.

XX 26-OCT-1999; 99US-0161532P.

XX (IMMU-) IMMUSOL INC.

XX Robbins JM, Tritz R;

XX WPI; 2001-300427/31.

XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
PT that cleave RNA encoding cytokines involved in inflammation, matrix  
PT metalloproteinases, growth factors and cell-cycle dependent kinases.

XX Example 1; Page 209; 408pp; English.

XX The present invention describes a method for treating a proliferative  
CC skin or eye disease and scarring. The method involves administering a  
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
CC dependent kinase, growth factor or a reductase, or administering a  
CC nucleic acid molecule (II) comprising a promoter operably linked to a  
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,  
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
CC ophthalmological, vulnery, keratolytic and virucide activities, and  
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic  
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention  
XX

SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 19;  
Best Local Similarity 89.5%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 993 GAACCTGCTCATCAACGAG 1011  
 Db 1 GAACCTGCTCACCACGAG 19

RESULT 197

AAH58336

ID AAH58336 standard; DNA; 19 BP.

AC AAH58336;

XX

XX

DT 10-SEP-2001 (first entry)

XX

DE Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:760.

XX

XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;

KW recognition site; target; ribozyme binding site; eye disease; vulnery;

KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;

KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;

KW matrix metalloproteinase; growth factor; reductase; scarring; cytotstatic;

KW antipsoiatric; dermatological; antiseborrheic; antidiabetic; virucide;

KW antiscikling; ophthalmological; keratolytic; gene therapy; viral wart;

KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;

KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;

KW sickle cell retinopathy; ss.

XX

OS Homo sapiens.

OS Synthetic.

XX

XX WO200130362-A2.

PN

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PD 03-MAY-2001.

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Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1027 CTGGCTGACTTGGCTGG 1045

Db 1 CTGGCAGATTTGGCTGG 19

RESULT 198

AAH58337

ID AAH58337 standard; DNA; 19 BP.

AC

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DT 10-SEP-2001 (first entry)

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Query Match 0.9%; Score 15.8; DB 1; Length 19;  
 Best Local Similarity 89.5%; Pred. No. 3.4e+02;

Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.

Example 1; Page 127; 408pp; English.

The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a dermatological, cytostatic, antiseborrheic, antidiabetic, antiscikling, ophthalmological, vulnery, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention

Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 19;  
Best Local Similarity 89.5%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1028 TGGCTGACTTTGGCCTGGC 1046  
|||||  
Db 1 TGGCAGATTTTGGCCTGGC 19

RESULT 199  
AAH58338  
ID AAH58338 standard; DNA; 19 BP.  
XX AC AAH58338;  
DT 10-SEP-2001 (first entry)  
XX Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:762.  
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
KW recognition site; target; ribozyme binding site; eye disease; vulnery;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine, inflammation; cell-cycle dependent kinase; cyclin; MMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;  
KW antisticking; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.  
XX Homo sapiens.  
OS Synthetic.  
OS WO200130362-A2.  
XX FN  
XX PD 03-MAY-2001.  
XX PF 26-OCT-2000; 2000WO-US029500.  
XX PR 26-OCT-1999; 99US-0161532P.  
XX PA (IMMU-) IMMUSOL INC.  
XX PI Robbins JM, Tritz R;  
XX WPI; 2001-300427/31.  
XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
PT that cleave RNA encoding cytokines involved in inflammation, matrix  
PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
XX Example 1; Page 127; 408pp; English.

XX The present invention describes a method for treating a proliferative  
CC skin or eye disease and scarring. The method involves administering a  
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
CC dependent kinase, growth factor or a reductase, or administering a  
CC nucleic acid molecule (II), comprising a promoter operably linked to a  
CC nucleic acid segment encoding (I). (I) can have antiproliferative,  
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisticking,  
CC ophthalmological, vulnery, keratolytic and virucide activities, and  
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic  
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention

SQ Sequence 19 BP; 2 A; 5 C; 7 G; 5 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15.8; DB 1; Length 19;  
Best Local Similarity 89.5%; Pred. No. 3.4e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1029 GGCTGACTTTGGCCTGGCC 1047  
|||||  
Db 1 GGCAATTTTGGCCTGGCC 19

RESULT 200  
AAH66612  
ID AAH66612 standard; DNA; 20 BP.  
XX AC AAH66612;  
DT 09-OCT-2000 (first entry)  
XX Dog genomic marker oligonucleotide sequence SEQ ID NO:474.  
XX Dog; genome; genomic marker; radiation hybrid map; identification;  
KW chromosome location; gene marker; polymorphic microsatellite marker;  
KW phenotype; behaviour; pedigree; ss.  
XX Canis familiaris.  
OS WO200029615-A2.  
XX PN  
XX PD 25-MAY-2000.  
XX PF 15-NOV-1999; 99WO-IB001907.  
XX PR 13-NOV-1998; 98US-0108193P.  
XX PA (CNRS ) CNRS CENT NAT RECH SCI.  
XX PI Galibert F, Andre C;  
XX WPI; 2000-387821/33.  
XX New radiation hybrid map of the dog, Canine familiaris, genome, useful  
PT for e.g. identifying genes implicated in phenotypic and behavioral traits  
PT or in genetic diseases and for studying dog pedigrees.  
XX Claim 1; Page 73; 87pp; English.

XX The present invention describes a radiation hybrid map of the dog (Canine  
CC familiaris) genome comprising the genome location of a marker selected  
CC from AAH66139 to AAH66942. The radiation hybrid map is useful for  
CC identifying and localising dog genes, since it covers approximately 80 %  
CC of the dog genome and provides a dense map integrating different types  
CC (i.e. Type I and Type II) of markers. The map and the dog genome markers  
CC (or complementary sequences) are especially useful to identify genes  
CC responsible for phenotypic and behavioural traits in dogs, to identify  
CC morbid genes, to analyse diseases and identify implicated genes in such  
CC diseases and their alleles and to study dog pedigrees. They may also be  
CC useful for isolating corresponding human gene sequences e.g. genes  
CC involved in genetic diseases

SQ Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1437 GGATGCCATGAACATCCA 1455  
|||||  
Db 1 GGATTCATGACATCCA 19

RESULT 201  
AAH66524

AAAG6524 standard; DNA; 20 BP.  
AAA66524;  
09-OCT-2000 (first entry)  
Dog genomic marker oligonucleotide sequence SEQ ID NO:386.  
Dog; genome; genomic marker; radiation hybrid map; identification;  
chromosome location; gene marker; polymorphic microsatellite marker;  
phenotype; behaviour; pedigree; ss.  
Canis familiaris.  
WO200029615-A2.  
25-MAY-2000.  
15-NOV-1999; 99WO-IB001907.  
13-NOV-1998; 98US-0108193P.  
(CNRS ) CNRS CENT NAT RECH SCI.  
Galibert F, Andre C;  
WPI; 2000-387821/33.  
New radiation hybrid map of the dog, Canine familiaris, genome, useful  
for e.g. identifying genes implicated in phenotypic and behavioral traits  
or in genetic diseases and for studying dog pedigrees.  
Claim 1; Page 69; 87pp; English.  
The present invention describes a radiation hybrid map of the dog (Canine  
familiaris) genome comprising the genome location of a marker selected  
from AAA66139 to AAA66942. The radiation hybrid map is useful for  
identifying and localising dog genes, since it covers approximately 80 %  
of the dog genome and provides a dense map integrating different types  
(i.e. Type I and Type II) of markers. The map and the dog genome markers  
(or complementary sequences) are especially useful to identify genes  
responsible for phenotypic and behavioural traits in dogs, to identify  
morbidity genes, to analyse diseases and identify implicated genes in such  
diseases and their alleles, and to study dog pedigrees. They may also be  
useful for isolating corresponding human gene sequences e.g. genes  
involved in genetic diseases  
Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1437 GGATGCCATGAACATCCA 1455  
Db 1 GGATCCATGAGACATCCA 19  
RESULT 202  
AAF72934  
ID AAF72934 standard; DNA; 20 BP.  
XX AAF72934;  
XX AAF72934;  
XX 24-APR-2001 (first entry)  
XX Human daxe inhibitory antisense phosphorothioate oligonucleotide SEQ:35.  
XX Antisense oligonucleotide; daxe; inhibition; phosphorothioate;  
XX Fas binding protein; CENP-C binding protein; dap6; EAP; cytostatic;  
XX antiinflammatory; death associated protein 6; Bts-1 associated protein;  
XX infection; inflammation; tumour formation; ss.  
XX

OS Homo sapiens.  
XX US6180353-B1.  
XX 30-JAN-2001.  
PD 24-JAN-2000; 2000US-00490692.  
PF 24-JAN-2000; 2000US-00490692.  
PR 24-JAN-2000; 2000US-00490692.  
XX (ISIS-) ISIS PHARM INC.  
XX Dean NM, Cowsert LM;  
XX WPI; 2001-217744/22.  
XX Novel antisense compounds capable of modulating expression of daxe useful  
for diagnosis, prophylaxis and treatment of diseases associated with  
expression of daxe.  
XX Claim 1; Col 42; 59pp; English.  
XX The present invention describes an antisense compound (I) up to 30  
nucleobases in length, where (I) inhibits expression of daxe (also known  
as Fas binding protein, CENP-C binding protein, dap6 for death associated  
protein 6 and EAP for Bts-1 associated protein). (I) has cytostatic and  
antiinflammatory activity, and can be used in antisense therapy and as a  
modulator of daxe. (I) is useful for inhibiting the expression of daxe in  
cells or tissues in vitro. (I) can be utilised for diagnostics, expression  
of daxe, prophylaxis e.g. to prevent or delay infection, inflammation or  
tumour formation and as research reagent. The present sequence represents  
an inhibitory human daxe antisense phosphorothioate oligonucleotide which  
is used in the exemplification of the present invention  
Sequence 20 BP; 3 A; 3 C; 10 G; 4 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 229 ACTGTGCTGCTGGCGCA 247  
Db 2 ATTGAGGTGCTGGCGCA 20  
RESULT 203  
ABQ74636/c  
ID ABQ74636 standard; DNA; 20 BP.  
XX ABQ74636;  
AC ABQ74636;  
XX 24-OCT-2002 (first entry)  
XX CDC2 gene antisense PCR primer SEQ ID NO:68.  
XX Human; PCR primer; identification; tumour senescence; cytotoxic; ss;  
XX abnormal cell proliferation; neoplastic cell growth; growth-inhibitory.  
XX Homo sapiens.  
OS Synthetic.  
XX WO2000261134-A2.  
XX 08-AUG-2002.  
XX 21-DEC-2001; 2001WO-US050574.  
XX 21-DEC-2000; 2000US-0257907P.  
XX 17-DEC-2001; 2001US-00257907.  
XX (UNII ) UNIV ILLINOIS FOUND.  
XX

PI Roninson IB, Chang B;  
XX WPI; 2002-619266/66.  
XX Identifying a compound that induces senescence in a mammalian p53  
XX deficient or tumor cell comprises assaying expression of cellular genes  
PT in the presence of the compound with expression of the genes in the  
PT absence of the compound.  
XX  
XX Example 4; Page 50; 73pp; English.  
XX  
XX The present invention describes a method for identifying a compound that  
XX induces senescence in a mammalian cell comprising culturing the cell in  
CC the presence and absence of the compound, assaying expression of at least  
CC one cellular gene (G1a) from 56 or a gene (G2) from 64 genes, with  
CC corresponding accession numbers given in the specification, and  
CC identifying compounds that induce senescence when expression of (G1a) or  
CC expression of (G2) is lower, in the presence of the compound. Also  
CC described: (1) a compound that induces senescence in a mammalian cell;  
CC (2) assessing efficacy of a treatment of a disease or condition relating  
CC to abnormal cell proliferation or neoplastic cell growth; (3) treating a  
CC disease or condition relating to abnormal cell proliferation or  
CC neoplastic cell growth; or (4) identifying a compound that inhibits  
CC senescence-associated induction of cellular gene expression. The compound  
CC is useful for treating or for assessing efficacy of treatment of a  
CC disease or condition relating to abnormal cell proliferation or  
CC neoplastic cell growth. The compound of the invention has a growth-  
CC inhibitory effect without producing systemic side effects found with  
CC other growth-inhibitory compounds. ABQ74611 to ABQ74734 represent PCR  
CC primers which are used in an example from the present invention  
XX  
SQ Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.9%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 1024 AAGCTGGCTGACTTTGCC 1042  
Dy 19 AAAGTGGCTGACTTTGCC 1  
  
RESULT 204  
ABZ90928/c  
ID ABZ90928 standard; DNA; 20 BP.  
XX  
XX AC ABZ90928;  
XX  
XX DT 17-OCT-2003 (first entry)  
XX  
XX DE Human oligonucleotide sequence.  
XX  
XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO200295308-A2.  
XX  
XX PD 31-OCT-2002.  
XX  
XX PF 23-APR-2002; 2002WO-US013135.  
XX  
XX PR 24-APR-2001; 2001US-0286137P.  
XX  
XX PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.  
XX  
XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
XX PS Disclosure; SEQ ID NO 6170; 872pp; English.  
XX  
XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.9%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 1018 GAGCTCAAGCTGGCTGACT 1036  
Dy 20 GAGCTCACCTGGCTGACT 2  
  
RESULT 205  
ABZ98911/c  
ID ABZ98911 standard; DNA; 20 BP.  
XX  
XX AC ABZ98911;  
XX  
XX DT 17-OCT-2003 (first entry)  
XX  
XX DE Human PDE4A oligonucleotide sequence.  
XX  
XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO200285308-A2.  
XX  
XX PD 31-OCT-2002.  
XX  
XX PF 23-APR-2002; 2002WO-US013135.  
XX  
XX PR 24-APR-2001; 2001US-0286137P.  
XX  
XX PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 14153; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antinflammatory steroid and ubiquinone. A composition of the invention  
CC has antinflammatory, antiasthmatic, antiallergic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 535 AGCCCATCTTTGACAAAGC 553  
Db 20 AGCCCCATGTGTGACAAAGC 2  
RESULT 206  
ID ABZ86780/c  
AC ABZ86780 standard; DNA; 20 BP.  
AC ABZ86780;  
DT 17-OCT-2003 (first entry)  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antinflammatory steroid; ubiquinone; antinflammatory; antiasthmatic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
OS Homo sapiens.  
XX  
XX WO200285308-A2.  
PN 31-OCT-2002.  
XX  
XX 23-APR-2002; 2002WO-US013135.  
XX  
XX 24-APR-2001; 2001US-0286137P.  
XX  
XX (EPIG-) EPIGENESIS PHARM INC.  
XX  
XX Nyce JW, Li Y, Sandrasegna A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Claim 15; SEQ ID NO 2022; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antinflammatory steroid and ubiquinone. A composition of the invention  
CC has antinflammatory, antiasthmatic, antiallergic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 3.6e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 929 AGCTGCTCCGTGGCTGGC 947  
Db 19 AGCTGATCCGAGGCTGGC 1  
RESULT 207  
AAF97316  
ID AAF97316 standard; DNA; 21 BP.  
XX  
AC AAF97316;  
DT 06-JUN-2001 (first entry)  
DE Human gene single nucleotide polymorphism #2077.  
XX  
KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;  
KW polymorphism; vascular disease; coronary artery disease; forensics;  
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;  
KW pulmonary embolism; paternity test; ds.  
XX  
OS Homo sapiens.  
XX  
XX Key Location/Qualifiers  
XX Variation replace(11,T)  
XX /\*tag= a  
XX /standard\_name= "single nucleotide polymorphism"  
XX  
XX WO200118250-A2.  
XX  
XX 15-MAR-2001.  
XX  
XX 07-SEP-2000; 2000WO-US024503.  
XX  
XX 10-SEP-1999; 99US-0153357P.  
XX 26-JUL-2000; 2000US-0220947P.  
XX 16-AUG-2000; 2000US-0225724P.

```
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA (MILL-) MILLENNIUM PHARM INC.
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
XX WPI; 2001-226749/23.
XX Nucleic acids comprising single nucleotide polymorphisms, useful in
XX applications such as forensics, paternity testing, medicine, genetic
XX analysis and phenotype correlations to diseases such as diabetes and
XX atherosclerosis.
XX Example; Page 189; 242pp; English.
XX The present invention provides a method of diagnosing a vascular disease
XX in an individual, involving determining the sequence at various
XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX genes. The sequences at a number of polymorphic sites are also provided
XX in the specification. In particular, the method can be used in the
XX diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX useful in forensics, paternity testing, genetic analysis and phenotype
XX correlations to diseases. The present sequence is an example of one of
XX the human gene SNPs shown in the specification
XX Sequence 21 BP; 2 A; 5 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 3.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1027 CTGGTGACTTGGCCCTGG 1045
DB 3 CTGGTGACTTGGCCCTGG 21

RESULT 208
AAH62396
ID AAH62396 standard; DNA; 21 BP.
AC AAH62396;
XX 12-SEP-2001 (first entry)
DE NFE2L1 polymorphism containing DNA fragment #297.
KW Single nucleotide polymorphism; SNP; human; cancer; inflammation;
KW heart disease; paternity testing; forensic science; ds.
XX Homo sapiens.
OS
XX Key Location/Qualifiers
XX Variation replace(11,C)
XX /*tag= a
XX /standard_name= "single nucleotide polymorphism"
XX
XX WO200138576-A2.
XX
XX 31-MAY-2001.
XX
XX 17-NOV-2000; 2000WO-US031639.
XX
XX 24-NOV-1999; 99US-0167334P.
XX
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
XX Gargill M, Ireland JS, Lander ES;
XX WPI; 2001-367705/38.
XX
XX New nucleic acid segments of the human genome, particularly from genes
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```
PT including polymorphic sites, for phenotype correlation, forensics,
PT paternity testing, medicine and genetic analysis.
XX Claim 1; Page 53; 80pp; English.
XX DNA sequences AAH62100 - AAH62688 represent segments of human genes which
XX contain single nucleotide polymorphisms (SNPs). A method is included in
XX the invention for analysing a nucleic acid sample, which consists of
XX determining the base occupying any one of the polymorphic sites given in
XX the SNP containing sequences. The nucleotide sequences can be used in the
XX diagnosis or monitoring of diseases, such as cancer, inflammation, heart
XX diseases, diseases of the cardiovascular system, and infection by
XX microorganisms. The oligonucleotides are also useful in the manufacture
XX of a medicament for the treatment or prophylaxis of the diseases, and as
XX a pharmaceutical. SNP containing oligonucleotides are useful in
XX applications such as phenotype correlation, forensics, paternity testing,
XX medicine and genetic analysis
XX Sequence 21 BP; 5 A; 5 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 3.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 43 GGAGGACCCAGCGCTGTGAC 61
DB 2 GGAGGACCTGCAGCGTGAC 20

RESULT 209
ABX72455/c
ID ABX72455 standard; DNA; 22 BP.
XX AC ABX72455;
XX 03-JUN-2003 (first entry)
XX Human NOVX DNA PCR primer #120.
XX
XX Human; PCR; ss; metabolic disorder; cardiomyopathy; diabetes; ASD;
XX hypertension; congenital heart defect; aortic stenosis; valve disease;
XX atrial septal defect; atrioventricular canal defect; ductus arteriosus;
XX pulmonary stenosis; subaortic stenosis; ventricular septal defect; VSD;
XX tuberosus sclerosis; scleroderma; atherosclerosis; infectious disease;
XX obesity; anorexia; neurodegenerative disorder; Alzheimer's disease;
XX Parkinson's disease; immune disorder; haematopoietic disorder; primer;
XX haemophilia; hypercoagulation; Crohn's disease; cancer.
XX Homo sapiens.
XX WO200281498-A2.
XX 17-OCT-2002.
XX
XX 03-APR-2002; 2002WO-US010780.
XX
XX 03-APR-2001; 2001US-0281086P.
XX 03-APR-2001; 2001US-0281136P.
XX 05-APR-2001; 2001US-0281863P.
XX 06-APR-2001; 2001US-0281906P.
XX 10-APR-2001; 2001US-0282020P.
XX 10-APR-2001; 2001US-0282930P.
XX 12-APR-2001; 2001US-0282934P.
XX 13-APR-2001; 2001US-028312P.
XX 13-APR-2001; 2001US-0283710P.
XX 17-APR-2001; 2001US-0284234P.
XX 19-APR-2001; 2001US-0285325P.
XX 20-APR-2001; 2001US-0285381P.
XX 20-APR-2001; 2001US-0285609P.
XX 23-APR-2001; 2001US-0285748P.
XX 23-APR-2001; 2001US-0285890P.
XX 24-APR-2001; 2001US-0286068P.
XX 25-APR-2001; 2001US-0286292P.
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PR 27-APR-2001; 2001US-0287213P.
PR 02-MAY-2001; 2001US-0288257P.
PR 29-MAY-2001; 2001US-0294164P.
PR 30-MAY-2001; 2001US-0294484P.
PR 18-JUN-2001; 2001US-0298952P.
PR 19-JUN-2001; 2001US-0299377P.
PR 19-JUN-2001; 2001US-0299276P.
PR 12-SEP-2001; 2001US-0318750P.
PR 25-SEP-2001; 2001US-0324800P.
PR 25-SEP-2001; 2001US-0324802P.
PR 17-SEP-2001; 2001US-0325684P.
PR 17-OCT-2001; 2001US-0330143P.
PR 14-NOV-2001; 2001US-0332131P.
PR 14-NOV-2001; 2001US-0332240P.
PR 14-NOV-2001; 2001US-0332779P.
PR 21-NOV-2001; 2001US-0332115P.
PR 04-DEC-2001; 2001US-0337621P.
PR 03-JAN-2002; 2002US-0345783P.
PR 16-JAN-2002; 2002US-0350251P.
PR 02-APR-2002; 2002US-00114270.
XX
XX (CURA-) CURAGEN CORP.
PI Guo X, Kekuda R, Miller CE, Malyankar UM, Spytek KA;
PI Patturajan M, Liu X, Gusev VY, Li L, Vernet CAM, Zerhusen BD;
PI Gorman L, Shenoy SG, Pena CE, Smithson G, Burgess CE, Gerlach V;
PI Padigaru M, Shinkets RA, Gangolli EA, Raupier RJ, Casman SJ, Ji W;
PI Anderson DW, Leite MW, Rastelli L, Edinger SR, Stone DJ;
PI MacDougall JR, Rothenberg ME, Mazur A, Millet I, Peyman JA;
PI Ellerman K;
XX
XX WPI; 2003-046858/04.
XX
XX New isolated NOVX polypeptide useful for treating atherosclerosis,
XX metabolic disorders, diabetes, obesity, infectious disease, anorexia,
XX neurodegenerative disorders, Alzheimer's disease and cancer.
XX
XX Example 83; Page 545; 666pp; English.
XX
XX The invention relates to human polypeptides, termed NOVX, and the
XX polynucleotides encoding them. The polypeptides and polynucleotides are
XX useful for diagnosing disease, and screening for potential therapeutic
XX agents. The sequences are useful for treating metabolic disorders,
XX cardiomyopathy, diabetes, hypertension, congenital heart defects, aortic
XX stenosis, atrial septal defect (ASD), atrioventricular canal defect,
XX ductus arteriosus, pulmonary stenosis, subaortic stenosis, ventricular
XX septal defect (VSD), valve diseases, tuberculous sclerosis, scleroderma,
XX atherosclerosis, obesity, infectious disease, anorexia, neurodegenerative
XX disorders, Alzheimer's disease, Parkinson's disease, immune disorders,
XX haematopoietic disorders, haemophilia, hypercoagulation, Crohn's disease
XX and cancer. This sequence represents a PCR primer used to amplify a human
XX NOVX polynucleotide of the invention
XX
XX Sequence 22 BP; 4 A; 8 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.8; DB 1; Length 22;
XX Best Local Similarity 89.5%; Pred. No. 4e+02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 846 GTACCTGGACAGGACCTG 864
XX 20 GTACCTGGAGAGTACCTG 2
XX
XX RESULT 210
XX AAH47509
XX ID AAH47509 standard; DNA; 23 BP.
XX
XX AC AAH47509;
XX
XX 30-NOV-2001 (first entry)
XX
XX Forward primer used in the construction of plasmid pSM847.
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XX Cloning vector; pSM843; rep gene; ORF81; trbA; para; cad operon;
XX antibiotic resistance; caduim; SoxA; SoxB; SoxC; sox enzyme;
XX Rhodococcus; sulfur; fossil fuel; promoter; PCR primer; ss.
XX Synthetic.
XX
XX EF1127943-A2.
XX
XX 29-AUG-2001.
XX
XX 19-FEB-2001; 2001EP-00200582.
XX
XX 24-FEB-2000; 2000IT-MI000332.
XX
XX (ENIE ) ENITECNOLOGIE SPA.
XX
XX Margarit Y Rosi, Serbolisca LP, De Ferra F, Rodriguez F;
XX
XX WPI; 2001-551402/62.
XX
XX Plasmid vector of Rhodococcus for producing proteins such as enzymes
XX involved in the removal of organic sulfur from fossil fuels, comprises a
XX para gene, genes encoding proteins involved in replication, and a genetic
XX marker.
XX
XX Example 7; Page 8; 24pp; English.
XX
XX The invention provides a cloning vector pSM843, comprising the rep genes
XX ORF81 and trbA (encoding proteins involved in replication in
XX Rhodococcus), the gene para, and at least one gene which encodes a
XX genetic marker (selected from the cad operon) that confers resistance to
XX caduim or an antibiotic. The rep genes are useful for producing
XX homologous or heterologous proteins of interest such as enzymes involved
XX in the selective removal of organic sulfur from fossil fuels (SoxA, SoxB,
XX SoxC), L-amino acids, enantiomorphs of chiral compounds and carboxylic
XX acids in a microorganism. The proteins are preferably sox enzymes.
XX Microorganisms such as Rhodococcus, Gordona and Nocardia containing the
XX sox operon downstream to the constitutive promoter, in particular
XX Rhodococcus strain SMV114 CBS 102447, transformed with the vector are
XX useful for removing organic sulfur from fossil fuels. The expression
XX vector has high stability in the absence of selective pressure in the
XX transformed strains of Rhodococcus. The present sequence represents a PCR
XX primer used in the construction of the vector pSM847
XX
XX Sequence 23 BP; 7 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.8; DB 1; Length 23;
XX Best Local Similarity 89.5%; Pred. No. 4.2e+02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 414 GAGAGTGGTATGCGCAAC 432
XX ||||| ||||| ||||| |||||
XX 5 GAGAGTGCATATGCGGAC 23
XX
XX RESULT 211
XX ABV74691/C
XX ID ABV74691 standard; DNA; 24 BP.
XX
XX AC ABV74691;
XX
XX 03-FEB-2003 (first entry)
XX
XX Human ribosomal protein S4-18.04 PCR primer #1.
XX
XX Human ribosomal protein S4-18.04; tumour; haemopathy; HIV infection;
XX immunological disease; inflammation; cytostatic; anti-HIV; PCR; primer;
XX ss.
XX
XX Homo sapiens.
XX
XX CN1345823-A.
XX
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XX 24-APR-2002.  
XX 29-SEP-2000; 2000CN-00125506.  
XX 29-SEP-2000; 2000CN-00125506.  
XX (SHAN-) SHANGHAI BIOWINDOW GENE DEV INC.  
XX Mao Y, Xie Y;  
XX WPI; 2002-584314/63.  
XX Novel polypeptide-human ribosomal protein S4-18.04 and polynucleotide for  
XX encoding said polypeptide.  
XX Example 2; Page 17 (Disclosure); 33pp; Chinese.  
XX The present invention relates to human ribosomal protein S4-18.04 (see  
XX AB98784). The protein and its coding sequence can be used for treating  
XX several diseases, such as malignant tumors, haemopathy, HIV infection,  
XX immunological disease and various inflammations. The present sequence is  
XX a PCR primer, which was used in an example from the invention  
XX Sequence 24 BP; 8 A; 4 C; 6 G; 6 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15.8; DB 1; Length 24;  
Best Local Similarity 89.5%; Pred. No. 4.4e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 540 CATCTTGCACAGGCCCTC 558  
DB 22 CATCTTGCACAGGCCCTC 4  
RESULT 212  
ABL55122  
ID ABL55122 standard; DNA; 24 BP.  
XX AC ABL55122;  
XX 31-MAY-2002 (first entry)  
XX Human Myb protein 32 RT-PCR primer, SEQ ID NO:3.  
XX Human; Myb protein 32; recombinant production; cancer; HIV infection;  
XX human immunodeficiency virus; gene therapy; cytostatic; anti-HIV;  
XX reverse transcription-PCR; RT-PCR; primer; ss.  
XX Homo sapiens.  
XX CN1325886-A.  
XX 12-DEC-2001.  
XX 26-MAY-2000; 2000CN-00115890.  
XX 26-MAY-2000; 2000CN-00115890.  
XX (BODE-) BODE GENE DEV CO LTD SHANGHAI.  
XX Mao Y, Xie Y;  
XX WPI; 2002-196654/26.  
XX Polypeptide-human Myb protein 32 and polynucleotide for coding it, useful  
XX for treating cancer, and HIV infection.  
XX Example 2; Page 17 (Disclosure); 33pp; Chinese.  
XX The invention relates to human Myb protein 32 (AA049156) and to nucleic  
XX acids encoding it (ABL55122). The protein has a molecular weight of 32.  
XX KD. The invention also relates to a method for the recombinant production

CC of the protein, an antagonist of the protein, and the use of the protein,  
CC gene and antagonist in therapeutic applications. Myb protein 32 can be  
CC used in the treatment of a variety of diseases such as cancer and HIV  
CC (human immunodeficiency virus) infection. Sequences ABL55122-ABL55123  
CC represent reverse transcription-PCR (RT-PCR) primers used in an  
CC exemplification of the invention to isolate human Myb protein 32 cDNA  
XX Sequence 24 BP; 2 A; 12 C; 9 G; 1 T; 0 U; 0 Other;  
SQ

Query Match 0.9%; Score 15.8; DB 1; Length 24;  
Best Local Similarity 89.5%; Pred. No. 4.4e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 558 CAGCCGCCGCTCCGCGT 576  
DB 5 CAGCCGCCGCTCCGCGT 23

RESULT 213  
AAZ56474  
ID AAZ56474 standard; DNA; 22 BP.  
XX AC AAZ56474;  
XX 21-MAR-2000 (first entry)  
XX Vascular endothelial growth factor receptor KDR RT-PCR primer #5.  
XX Vascular endothelial growth factor receptor; KDR; VEGFR1; VEGFR;  
XX haematopoietic stem cell population; PCR primer; ss.  
XX Homo sapiens.  
XX WO9961584-A1.  
XX 02-DEC-1999.  
XX 28-MAY-1999; 99WO-US012054.  
XX 29-MAY-1998; 98US-0087153P.  
XX (UJTE-) UNIV JEFFERSON THOMAS.  
XX (SUPE-) INST SUPERIORE DI SANITA.  
XX (ZIEG/) ZIEGLER B L.  
XX Ziegler BL, Peschle C;  
XX WPI; 2000-086715/07.  
XX Preparation of a cell population.  
XX Example; Page 45; 83pp; English.

XX The present invention describes a method for preparing a cell population  
XX enriched for long-term repopulating human haematopoietic stem cells. The  
XX method comprises obtaining a population of cells from human  
XX haematopoietic tissue and isolating a population of KDR+ cells. KDR is a  
XX human vascular endothelial growth factor receptor (VEGFR1). The novel  
XX cell population can be used to inhibit rejection of a transplanted organ,  
XX by administering the KDR+ cells of the donor to a tissue recipient. The  
XX present sequence represents a reverse transcription PCR primer, which is  
XX used in an example from the present invention  
XX Sequence 22 BP; 8 A; 4 C; 7 G; 3 T; 0 U; 0 Other;  
SQ

Query Match 0.9%; Score 15.6; DB 1; Length 22;  
Best Local Similarity 81.8%; Pred. No. 4.4e+02;  
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 47 GACCAGCAGTGTGACTGCTGAA 68  
DB 1 GACAGGAGTGTGACCACTGAA 22

RESULT 214  
ABSS9078  
ID ABS59078 standard; DNA; 22 BP.  
XX  
AC ABS59078;  
XX  
DT 05-NOV-2002 (first entry)  
XX  
DE Human G-protein coupled receptor, forward primer #76.  
XX  
KW Human; G-protein coupled receptor; GPCR; cardiomyopathy; atherosclerosis;  
KW diabetes; cell signal processing; metabolic pathway modulation; cancer;  
KW adenocarcinoma; lymphoma; prostate cancer; uterus cancer; asthma;  
KW immune response; neurodegenerative disorder; inflammatory disorder;  
KW Crohn's disease; multiple sclerosis; Albright hereditary osteodystrophy;  
KW primer; PCR; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200259313-A2.  
XX  
PD 01-AUG-2002.  
XX  
PF 18-DEC-2001; 2001WO-US049394.  
XX  
PR 18-DEC-2000; 2000US-0256635P.  
PR 21-DEC-2000; 2000US-0257878P.  
PR 04-JAN-2001; 2001US-0259743P.  
PR 10-JAN-2001; 2001US-0260718P.  
PR 12-JAN-2001; 2001US-0261498P.  
PR 24-JAN-2001; 2001US-0263689P.  
PR 08-FEB-2001; 2001US-0267464P.  
PR 22-FEB-2001; 2001US-0271021P.  
PR 14-MAR-2001; 2001US-0275946P.  
PR 23-MAR-2001; 2001US-0278150P.  
PR 18-APR-2001; 2001US-0284591P.  
PR 23-APR-2001; 2001US-0285718P.  
PR 19-JUN-2001; 2001US-0299327P.  
PR 16-AUG-2001; 2001US-0312902P.  
XX  
PA (CURA-) CURAGEN CORP.  
XX  
PI Li L, Ballinger RA, Padigaru M, Kekuda R, Colman SD, Spytek KA;  
PI Casman SJ, Vernet CAM, Shenoy SG, Gusev V, Malyankar UM, Edinger S;  
PI Gerlach V, Smithson G, Stone DJ, Sciore P, Macdougall JR, Gunther E;  
PI Peyman JA, Ellerman K, Gangolli EA, Millet I;  
XX  
XX WPI; 2002-599789/64.  
XX  
XX New G protein coupled receptor polypeptides and polynucleotides, useful  
PT in gene therapy, particularly for treating or preventing cardiomyopathy,  
PT atherosclerosis, diabetes, multiple sclerosis, Crohn's disease or cancer  
PT in humans.  
XX  
XX Claim 9; Page 467; 685pp; English.  
XX  
XX The invention relates to novel isolated G-protein coupled receptor (GPCR)  
CC polypeptides and polynucleotides. The GPCR polypeptide, GPCR nucleic acid  
CC and antibody are useful for treating, preventing or alleviating a GPCR-  
CC associated disorder or a pathological state in a subject, particularly a  
CC human. In particular, the disorder is cardiomyopathy, atherosclerosis,  
CC diabetes, or a disorder related to cell signal processing and metabolic  
CC pathway modulation. The GPCR polypeptide and nucleic acid are also useful  
CC for diagnosing the presence of or predisposition to a disease associated  
CC with altered levels of GPCR, particularly cancer. The GPCR nucleic acid  
CC and polypeptide are especially useful in therapeutic or prophylactic  
CC applications for disorders associated with aberrant GPCR expression or  
CC activity. The DNA encoding the protein is useful in gene therapy for  
CC treating the above conditions. Furthermore, the nucleic acids and  
CC polypeptides are useful in treating adenocarcinoma, lymphoma, prostate  
CC cancer, uterus cancer, immune response, neurodegenerative disorders,  
CC asthma, inflammatory disorders, Crohn's disease, multiple sclerosis or

CC Albright hereditary osteodystrophy. These are also useful in developing a  
CC powerful assay system for functional analysis of various human disorders,  
CC as well as in diagnostic applications. ABS58747-ABS59231 represent human  
CC GPCR coding sequences, primers and probes of the invention  
XX  
SQ Sequence 22 BP; 3 A; 6 C; 4 G; 9 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15.6; DB 1; Length 22;  
Best Local Similarity 81.8%; Pred. No. 4.4e+02;  
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 820 GAGAGTCCCTCACCCTTGCT 841  
DB 1 GCGAAGTTCCTTACCCTTTCT 22  
RESULT 215  
AAQ37360  
ID AAQ37360 standard; DNA; 23 BP.  
XX  
AC AAQ37360;  
XX  
DT 25-MAR-2003 (revised)  
DT 20-JUN-1993 (first entry)  
XX  
DE Probe for Streptococcus agalactiae 16S rRNA gene fragments.  
XX Bacterium; cerebrospinal fluid; CSF; 16S rRNA; meningitis; ss.  
XX Synthetic.  
XX WO9303186-A1.  
XX 18-FEB-1993.  
XX 31-JUL-1992; 92WO-US006365.  
XX 31-JUL-1991; 91US-00738393.  
XX (HOFF) HOFFMANN LA ROCHE INC.  
XX Greisen KS, Leong DU;  
XX WPI; 1993-076541/09.  
XX  
XX Detecting bacteria causing meningitis in cerebrospinal fluid - by  
PT amplifying target regions and detecting using panel of probes which  
PT includes universal bacterial probe.  
XX  
XX Example 5; Page 29; 65pp; English.  
XX  
XX A series of synthetic probes were tested for their ability to hybridise  
CC to specific bacterial species in the CSF. For the detection of  
CC Streptococcus agalactiae probe VP109 lacking 2 bases from the 5' end  
CC gives an improved detection rate. See also AAQ37314-59. (Updated on 25-  
CC MAR-2003 to correct FN field.)  
XX  
SQ Sequence 23 BP; 8 A; 2 C; 6 G; 7 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15.6; DB 1; Length 23;  
Best Local Similarity 81.8%; Pred. No. 4.6e+02;  
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 585 AFTCGAGATTGGCTTTGGAAA 606  
DB 1 AACTGAGATTGGCTTTAAGAGA 22  
RESULT 216  
AAQ37359/c  
ID AAQ37359 standard; DNA; 23 BP.  
XX  
AC AAQ37359;

XX 25-MAR-2003 (revised)  
 DT 20-JUN-1993 (first entry)  
 XX  
 DE Probe for Streptococcus agalactiae 16S rRNA gene fragments.  
 XX  
 KW Bacterium; cerebrospinal fluid; CSF; 16S rRNA; meningitis; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN W09303186-A1.  
 XX  
 PD 18-FEB-1993.  
 XX  
 PF 31-JUL-1992; 92WO-US006365.  
 XX  
 PR 31-JUL-1991; 91US-00738393.  
 XX  
 PA (HOFF ) HOFFMANN LA ROCHE INC.  
 XX  
 XX Greisen KS, Leong DU;  
 PI WPI; 1993-076541/09.  
 DR  
 XX Detecting bacteria causing meningitis in cerebrospinal fluid - by  
 PT amplifying target regions and detecting using panel of probes which  
 PT includes universal bacterial probe.  
 XX  
 PS Example 5; Page 29; 65pp; English.  
 XX  
 CC A series of synthetic probes were tested for their ability to hybridise  
 CC to specific bacterial species in the CSF. For the detection of  
 CC Streptococcus agalactiae probe KG00001 lacking 2 bases from the 5' end  
 CC gives an improved detection rate. See also AAQ37314-60. (Updated on 25-  
 CC MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 23 BP; 7 A; 6 C; 2 G; 8 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.6; DB 1; Length 23;  
 Best Local Similarity 81.8%; Pred. No. 4.6e+02;  
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 585 ATCTGAGATTGGCTTTGGGAAA 606  
 DB 23 AACTGAGATTGGCTTTAAGAGA 2  
 RESULT 217  
 AAX02161  
 ID AAX02161 standard; DNA; 23 BP.  
 XX  
 AC AAX02161;  
 XX  
 DT 23-APR-1999 (first entry)  
 XX  
 DE Human IVS17 3'-acceptor splice site PCR primer #9.  
 XX  
 KW IVS17 acceptor splice site; PCR primer; detection; base-pair mutation;  
 KW heteroduplex; homoduplex; migration; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN US5874212-A.  
 XX  
 PD 23-FEB-1999.  
 XX  
 PF 06-JUN-1995; 95US-00468551.  
 XX  
 PR 13-MAY-1993; 93US-000061574.  
 XX  
 PA (UYJE-) UNIV JEFFERSON THOMAS.  
 XX

PI Ganguly A, Rock MJ, Prockop DJ;  
 XX WPI; 1999-179967/15.  
 XX  
 DE Detection of nucleic acid mutations - by electrophoresis in  
 PT polyacrylamide gel that distinguishes heteroduplexes from homoduplexes.  
 XX  
 PS Disclosure; Col 5; 16pp; English.  
 XX  
 CC AAX02153-X02161 are primers used in a method for detecting one or more  
 CC base-pair mutations in a nucleic acid sequence by differentiating  
 CC heteroduplexes from homoduplexes. The method involves generating  
 CC homoduplexes and heteroduplexes in a sample and performing gel  
 CC electrophoresis on the sample using a polyacrylamide gel that causes  
 CC heteroduplexes to migrate more slowly than homoduplexes. The gel  
 CC comprises 3-20% polyacrylamide, 1-50% of at least one denaturing agent  
 CC selected from aliphatic alcohols, cyclic alcohols, alicyclic compounds,  
 CC amides, ureas and carbamates, 10-100 mM borate-free TE [Tris-HCl, EDTA]  
 CC buffer, and 10-100 mM taurine. The method has a high reliability and can  
 CC be improved by allowing for the presence of the mutations in domains with  
 CC high melting temperatures. These primers can specifically detect a  
 CC mutation in the human IVS17 3'-acceptor splice site  
 XX  
 SQ Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.6; DB 1; Length 23;  
 Best Local Similarity 81.8%; Pred. No. 4.6e+02;  
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 36 GTAGCAGGAGCAGCAGCAGTG 57  
 DB 1 GAAGCCAGGAGCAGCAGCAATG 22  
 RESULT 218  
 AAX040717  
 ID AAX040717 standard; DNA; 24 BP.  
 XX  
 AC AAX040717;  
 XX  
 DT 14-AUG-2001 (first entry)  
 XX  
 DE SNP specific upper PCR primer SEQ ID 3513.  
 XX  
 KW Single nucleotide polymorphism; SNP; single nucleotide primer extension;  
 KW SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;  
 KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;  
 KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;  
 KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;  
 KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200129262-A2.  
 XX  
 DT 26-APR-2001.  
 XX  
 DE 13-OCT-2000; 2000WO-US028436.  
 XX  
 PR 15-OCT-1999; 99US-0160096P.  
 XX  
 PA (ORCH-) ORCHID BIOSCIENCES INC.  
 XX  
 PI Picoult-Newburg L, Pohl M;  
 XX WPI; 2001-290930/30.  
 XX  
 DE New genotyping oligonucleotide, useful for detecting the presence,  
 PT absence or identity of single polynucleotide polymorphism in a nucleic  
 PT acid sample.  
 XX  
 PS Claim 1; Page 67; 83pp; English.  
 XX

CC Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide  
CC primer extension (SNPE) primers, and the sequences of regions flanking  
CC sites of single nucleotide polymorphisms SNPs. The present invention  
CC includes kits for determining the presence or absence of a SNP, using the  
CC oligonucleotides of the invention. The PCR primers are used to amplify a  
CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.  
CC The oligonucleotides are useful for genotyping a nucleic acid sample by  
CC performing a single-nucleotide primer extension reaction. The  
CC oligonucleotides are useful for determining the presence, absence or  
CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to  
CC assess by association analysis the genotype of an individual or group of  
CC individuals, having a pathological phenotypic trait suspected of being  
CC caused by one or more SNPs. Phenotypic traits include diseases e.g.  
CC agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular  
CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,  
CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic  
CC traits also include symptoms of or susceptibility to multifactorial  
CC disease of which a component is or may be genetic such as autoimmune  
CC diseases, including, rheumatoid arthritis, multiple sclerosis,  
CC inflammation, cancer, nervous system diseases and infection by pathogenic  
CC microorganism. The method is also useful in forensic investigations and  
CC paternity analysis. The present sequence represents a PCR primer specific  
CC for a human SNP containing DNA sequence  
XX  
SQ Sequence 24 BP; 10 A; 9 C; 2 G; 3 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15.6; DB 1; Length 24;  
Best Local Similarity 81.6%; Pred. No. 4.8e+02;  
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1310 AGACATACAACTACCCCAAGTA 1331  
Db 3 ACACACACATCTACCCCAAGGA 24  
RESULT 219  
ID ABS54362/c  
XX ABS54362 standard; DNA; 24 BP.  
AC ABS54362;  
XX  
DT 23-DEC-2002 (first entry)  
XX  
DE Mucor circinelloides PKAC, primer pkaCrev.  
XX  
KW Morphology regulator; dimorphic fungal cell; fungal host organism;  
KW recombinant protein expression; growth; low viscosity; protein secretion;  
KW filamentous fungus; PKAC; primer; ss;  
KW CAMP-dependent protein kinase A catalytic subunit.  
XX  
OS Mucor circinelloides.  
XX  
PN WO200270721-A2.  
XX  
PD 12-SEP-2002.  
XX  
PF 08-MAR-2002; 2002WO-DK000157.  
XX  
PR 08-MAR-2001; 2001DK-00000395.  
XX  
PR 12-MAR-2001; 2001US-0274650P.  
XX  
PA (BIOT-) BIOTEKNOLOGISK INST.  
XX  
PI Wolff AM, Appel KF, Petersen JB, Poulsen U, Arnau J, Jacobsen MD;  
XX  
DR WPI; 2002-723266/78.  
XX  
PT New isolated polynucleotide encoding at least one regulator of morphology  
PT capable of regulating the morphology of a dimorphic fungal cell, useful  
PT for producing and/or secreting large quantities of commercially valuable  
PT proteins.  
XX  
PS Example 2; Page 120; 296pp; English.

XX The present invention relates to the isolation of polynucleotide  
CC sequences encoding at least one regulator of morphology and capable of  
CC regulating the morphology of a dimorphic fungal cell, and operably linked  
CC to a nucleotide sequence comprising an expression signal capable of  
CC directing the expression of the first sequence in a dimorphic fungal  
CC cell, where the sequences are not natively associated. The invention  
CC provides fungal host organisms capable of expressing recombinant proteins  
CC while at the same time exhibiting homogeneous growth and low viscosity  
CC characteristics. The fungal host organism has the capability for high  
CC protein secretion normally associated with filamentous fungi. The  
CC dimorphic fungal cells are useful for increasing production and/or  
CC secretion of large quantities of commercially valuable proteins. The  
CC present sequence represents a primer used in the examples of the present  
CC invention  
XX  
SQ Sequence 24 BP; 2 A; 3 C; 2 G; 7 T; 0 U; 10 Other;  
Query Match 0.9%; Score 15.6; DB 1; Length 24;  
Best Local Similarity 52.2%; Pred. No. 4.8e+02;  
Matches 12; Conservative 7; Mismatches 4; Indels 0; Gaps 0;  
QY 974 ACCGAGACCTCAAGCCCAAGAAC 996  
Db 23 AVMGNGAYVTNARCNGARAAY 1  
RESULT 220  
ID ABK90912/c  
XX ABK90912 standard; DNA; 24 BP.  
AC ABK90912;  
XX  
DT 05-NOV-2002 (first entry)  
XX  
DE Fruit fly LRR47 polypeptide 47-33.88, RT-PCR primer 1.  
XX  
KW Fruit fly; LRR47 polypeptide 47-33.88; embryonic development deformity;  
KW tumour; diabetes; menstrual disorder; peptide ulcer; arrhythmia; anaemia;  
KW epilepsy; reverse transcriptase PCR; RT-PCR; primer; ss.  
XX  
OS Drosophila sp.  
XX  
PN CN1341640-A.  
XX  
PD 27-MAR-2002.  
XX  
PF 05-SEP-2000; 2000CN-00125025.  
XX  
PR 05-SEP-2000; 2000CN-00125025.  
XX  
PA (SHAN-) SHANGHAI BIODOOR GENE DEV CO LTD.  
XX  
PI Mao Y, Xie Y;  
XX  
PD WPI; 2002-520716/56.  
XX  
PT A fruit fly LRR47 polypeptide 47-33.88, useful for curing e.g. tumours and  
PT diabetes.  
XX  
PS Example 3; Page 18 (Disclosure); 33pp; Chinese.  
XX  
CC The present invention relates to a new fruit fly LRR47 polypeptide 47-  
CC 33.88. The polypeptide is useful for curing several diseases, such as  
CC embryonic development deformity, tumour, diabetes, menstrual disorder,  
CC peptide ulcer, arrhythmia, anaemia and epilepsy. The present nucleic acid  
CC sequence represents a reverse transcriptase (RT)-PCR primer that was used  
CC in the methods of the invention to isolate the coding sequence of the  
CC fruit fly LRR47 polypeptide 47-33.88  
XX  
SQ Sequence 24 BP; 1 A; 8 C; 13 G; 2 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15.6; DB 1; Length 24;

```
Best Local Similarity 81.8%; Pred. No. 4.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 732 GGCACCCCTGCACCGCCATCCGG 753
   ||||| ||||| |||||
DB 23 GCCACCCGGCGCCGCAATCCGG 2

RESULT 221
ABQ10087
ID ABQ10087 standard; DNA; 24 BP.
XX
AC ABQ10087;
XX
DT 11-JUN-2002 (first entry)
XX
DE Oligonucleotide adapter/capture probe 10078.
XX
KW Oligonucleotide array; adapter sequence; probe; ss.
XX
OS Synthetic.
XX
PN WO200216649-A2.
XX
PD 28-FEB-2002.
XX
PF 27-AUG-2001; 2001WO-US026519.
XX
PR 25-AUG-2000; 2000US-0227948P.
XX
PT 29-AUG-2000; 2000US-0228854P.
XX
PA (ILLU-) ILLUMINA INC.
XX
PI Gunderson K;
XX
WPI; 2002-292068/33.
XX
Array comprising adapter sequences useful for immobilizing or detecting a
target nucleic acid sequence, has different addresses comprising
different specific capture probes.
Claim 1; Page 213; 261pp; English.
XX
The invention relates to an oligonucleotide array (I) comprising at least
25 different addresses (adapter sequences) with each comprising a
different capture probe selected from a group consisting of the sequences
given in ABQ00010-ABQ13409. (I) is useful for immobilising a target
nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-
ABQ13409) to a target nucleic acid to form a modified target nucleic acid
and contacting the modified target nucleic acid with (I). The steps of
above method is useful for detecting a target nucleic acid, which further
comprises detecting the presence of the modified target nucleic acid
Sequence 24 BP; 7 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 4.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 542 TCTTTGACAGCCCTCAGCCG 563
   ||||| ||||| |||||
DB 3 TCCTGGACAGACCCCTCAACCG 24

RESULT 222
ABQ10128/C
ID ABQ10128 standard; DNA; 24 BP.
XX
AC ABQ10128;
XX
DT 11-JUN-2002 (first entry)
XX
DE Oligonucleotide adapter/capture probe 10119.
XX
```

```
XX Oligonucleotide array; adapter sequence; probe; ss.
KW Synthetic.
OS WO200216649-A2.
PN 28-FEB-2002.
PD 27-AUG-2001; 2001WO-US026519.
PF 25-AUG-2000; 2000US-0227948P.
PR 29-AUG-2000; 2000US-0228854P.
XX (ILLU-) ILLUMINA INC.
XX Gunderson K;
XX WPI; 2002-292068/33.
XX Array comprising adapter sequences useful for immobilizing or detecting a
target nucleic acid sequence, has different addresses comprising
different specific capture probes.
Claim 1; Page 213; 261pp; English.
XX
The invention relates to an oligonucleotide array (I) comprising at least
25 different addresses (adapter sequences) with each comprising a
different capture probe selected from a group consisting of the sequences
given in ABQ00010-ABQ13409. (I) is useful for immobilising a target
nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-
ABQ13409) to a target nucleic acid to form a modified target nucleic acid
and contacting the modified target nucleic acid with (I). The steps of
above method is useful for detecting a target nucleic acid, which further
comprises detecting the presence of the modified target nucleic acid
Sequence 24 BP; 4 A; 4 C; 9 G; 7 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 4.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 542 TCTTTGACAGCCCTCAGCCG 563
   ||||| ||||| |||||
DB 22 TCCTGGACAGACCCCTCAACCG 1

RESULT 223
ABQ03115
ID ABQ03115 standard; DNA; 24 BP.
XX
AC ABQ03115;
XX
DT 11-JUN-2002 (first entry)
XX
DE Oligonucleotide adapter/capture probe 3106.
XX
KW Oligonucleotide array; adapter sequence; probe; ss.
XX
OS Synthetic.
XX
PN WO200216649-A2.
XX
PD 28-FEB-2002.
XX
PF 27-AUG-2001; 2001WO-US026519.
XX
PR 25-AUG-2000; 2000US-0227948P.
XX
PT 29-AUG-2000; 2000US-0228854P.
XX (ILLU-) ILLUMINA INC.
XX Gunderson K;
PI
```



CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and  
 CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,  
 CC Epstein-Barr virus and polio virus, and parasitic infectious agents  
 CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus  
 CC medinensis. The method is also useful for detecting genetic diseases such  
 CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.  
 CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes  
 CC involved in DNA amplification, replication, recombination or repair, the  
 CC cancer is specifically associated with a gene selected from BRCA1 gene,  
 CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The  
 CC method is also used for environmental monitoring, forensics and the food  
 CC and feed industry, detecting comprises scanning (using e.g. a scanning  
 CC electron microscope and infrared microscope) the support at the  
 CC particular sites and identifying if ligation of the oligonucleotide probe  
 CC sets occurred and correlating (using a computer) identified ligation to a  
 CC presence or absence of the target nucleotide sequences. ABI82074 to  
 CC AB197546 represent oligonucleotide sequences used in the exemplification  
 CC of the present invention  
 XX  
 SQ Sequence 24 BP; 3 A; 6 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 24;  
 Best Local Similarity 81.8%; Pred. No. 4.8e+02;  
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1118 TCCTGCTGGTCCACGGACTA 1139  
 |||||  
 Db 3 TCCTGCTGGTCCATGGACGA 24

RESULT 226  
 ABI92132/C  
 ID ABI92132 standard; DNA; 24 BP.  
 XX  
 AC ABI92132;  
 XX  
 DT 15-FEB-2002 (first entry)  
 XX  
 DE Capture oligonucleotide zip ID#235 oligo #3.  
 XX  
 DE Human; K-ras; PCR primer; probe; capture probe; mutation detection;  
 XX  
 KW Ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;  
 XX  
 KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;  
 KW oncogene; tumour suppressor; human papillomavirus; forensic;  
 KW environmental monitoring; food industry; feed industry; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO200179548-A2.  
 XX  
 PD 25-OCT-2001.  
 XX  
 PF 04-APR-2001; 2001WO-US010958.  
 XX  
 PR 14-APR-2000; 2000US-0197271P.  
 XX  
 PA (CORR ) CORNELL RES FOUND INC.  
 XX  
 PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;  
 XX  
 DR WPI; 2002-034366/04.  
 XX  
 PT Designing capture oligonucleotide probes for use on a support to which  
 PT complementary oligonucleotides hybridize with little mismatch.  
 XX  
 PS Claim 3; Fig 26; 300pp; English.

CC The present invention describes a method (M1) for designing capture  
 CC oligonucleotide probes (I) for use on a support to which complementary  
 CC oligonucleotide probes (II) will hybridise with little mismatch where  
 CC (I) have melting temperatures within a narrow range. The method is useful  
 CC for detecting infectious diseases caused by bacterial infectious agents  
 CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal

CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and  
 CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,  
 CC Epstein-Barr virus and polio virus, and parasitic infectious agents  
 CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus  
 CC medinensis. The method is also useful for detecting genetic diseases such  
 CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.  
 CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes  
 CC involved in DNA amplification, replication, recombination or repair, the  
 CC cancer is specifically associated with a gene selected from BRCA1 gene,  
 CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The  
 CC method is also used for environmental monitoring, forensics and the food  
 CC and feed industry, detecting comprises scanning (using e.g. a scanning  
 CC electron microscope and infrared microscope) the support at the  
 CC particular sites and identifying if ligation of the oligonucleotide probe  
 CC sets occurred and correlating (using a computer) identified ligation to a  
 CC presence or absence of the target nucleotide sequences. ABI82074 to  
 CC AB197546 represent oligonucleotide sequences used in the exemplification  
 CC of the present invention  
 XX  
 SQ Sequence 24 BP; 7 A; 8 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 24;  
 Best Local Similarity 81.8%; Pred. No. 4.8e+02;  
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1118 TCCTGCTGGTCCACGGACTA 1139  
 |||||  
 Db 22 TCCTGCTGGTCCATGGACGA 1

RESULT 227  
 ABI92133  
 ID ABI92133 standard; DNA; 24 BP.  
 XX  
 AC ABI92133;  
 XX  
 DT 15-FEB-2002 (first entry)  
 XX  
 DE Capture oligonucleotide zip ID#235 oligo #4.  
 XX  
 DE Human; K-ras; PCR primer; probe; capture probe; mutation detection;  
 KW Ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;  
 KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;  
 KW oncogene; tumour suppressor; human papillomavirus; forensic;  
 KW environmental monitoring; food industry; feed industry; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO200179548-A2.  
 XX  
 PD 25-OCT-2001.  
 XX  
 PF 04-APR-2001; 2001WO-US010958.  
 XX  
 PR 14-APR-2000; 2000US-0197271P.  
 XX  
 PA (CORR ) CORNELL RES FOUND INC.  
 XX  
 PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;  
 XX  
 DR WPI; 2002-034366/04.  
 XX  
 PT Designing capture oligonucleotide probes for use on a support to which  
 PT complementary oligonucleotides hybridize with little mismatch.  
 XX  
 PS Claim 3; Fig 26; 300pp; English.

CC The present invention describes a method (M1) for designing capture  
 CC oligonucleotide probes (I) for use on a support to which complementary  
 CC oligonucleotide probes (II) will hybridise with little mismatch where  
 CC (I) have melting temperatures within a narrow range. The method is useful  
 CC for detecting infectious diseases caused by bacterial infectious agents  
 CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal



CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and  
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,  
CC Epstein-Barr virus and polio virus, and parasitic infectious agents  
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus  
CC medinensis. The method is also useful for detecting genetic diseases such  
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.  
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes  
CC involved in DNA amplification, replication, recombination or repair, the  
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The  
CC method is also used for environmental monitoring, forensics and the food  
CC and feed industry, detecting comprises scanning (using e.g. a scanning  
CC electron microscope and infrared microscope) the support at the  
CC particular sites and identifying if ligation of the oligonucleotide probe  
CC sets occurred and correlating (using a computer) identified ligation to a  
CC presence or absence of the target nucleotide sequences. ABI82074 to  
CC ABI97546 represent oligonucleotide sequences used in the exemplification  
CC of the present invention  
XX  
SQ Sequence 24 BP; 3 A; 6 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 24;  
Best Local Similarity 81.8%; Pred. No. 4.8e+02;  
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1118 TCCTGCTTGGTCCACGACTA 1139  
DB 3 TCTTGTCTGGTCCATGACGA 24

RESULT 228  
ABI82866/c  
ID ABI82866 standard; DNA; 24 BP.  
AC ABI82866;  
XX  
DT 15-FEB-2002 (first entry)  
XX  
DE Capture oligonucleotide Zip ID#235 oligo #1.  
XX  
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;  
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;  
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;  
KW oncogene; tumour suppressor; human papillomavirus; forensic;  
KW environmental monitoring; food industry; feed industry; ss.  
XX  
OS Synthetic.  
XX  
PN WO200179548-A2.  
XX  
PD 25-OCT-2001.  
XX  
PF 04-APR-2001; 2001WO-US010958.  
XX  
PR 14-APR-2000; 2000US-0197271P.  
XX  
PA (CORR ) CORNELL RES FOUND INC.  
XX  
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;  
XX  
DR WPI; 2002-034366/04.  
XX  
PT Designing capture oligonucleotide probes for use on a support to which  
PT complementary oligonucleotides hybridize with little mismatch.  
XX  
PS Example 5; Fig 25; 300pp; English.

XX The present invention describes a method (M1) for designing capture  
CC oligonucleotide probes (I) for use on a support to which complementary  
CC oligonucleotide probes (II) will hybridise with little mismatch, where  
CC (I) have melting temperatures within a narrow range. The method is useful  
CC for detecting infectious diseases caused by bacterial infectious agents  
e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal

CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and  
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,  
CC Epstein-Barr virus and polio virus, and parasitic infectious agents  
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus  
CC medinensis. The method is also useful for detecting genetic diseases such  
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.  
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes  
CC involved in DNA amplification, replication, recombination or repair, the  
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The  
CC method is also used for environmental monitoring, forensics and the food  
CC and feed industry, detecting comprises scanning (using e.g. a scanning  
CC electron microscope and infrared microscope) the support at the  
CC particular sites and identifying if ligation of the oligonucleotide probe  
CC sets occurred and correlating (using a computer) identified ligation to a  
CC presence or absence of the target nucleotide sequences. ABI82074 to  
CC ABI97546 represent oligonucleotide sequences used in the exemplification  
CC of the present invention  
XX

SQ Sequence 24 BP; 7 A; 8 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 24;  
Best Local Similarity 81.8%; Pred. No. 4.8e+02;  
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1118 TCCTGCTTGGTCCACGACTA 1139  
DB 22 TCTTGTCTGGTCCATGACGA 1

RESULT 229  
ABI84590/c  
ID ABI84590 standard; DNA; 24 BP.  
XX  
AC ABI84590;  
XX  
DT 15-FEB-2002 (first entry)  
XX  
DE Capture oligonucleotide Zip ID#1097 oligo #1.  
XX  
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;  
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;  
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;  
KW oncogene; tumour suppressor; human papillomavirus; forensic;  
KW environmental monitoring; food industry; feed industry; ss.  
XX  
OS Synthetic.  
XX  
PN WO200179548-A2.  
XX  
PD 25-OCT-2001.  
XX  
PF 04-APR-2001; 2001WO-US010958.  
XX  
PR 14-APR-2000; 2000US-0197271P.  
XX  
PA (CORR ) CORNELL RES FOUND INC.  
XX  
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;  
XX  
DR WPI; 2002-034366/04.  
XX  
PT Designing capture oligonucleotide probes for use on a support to which  
PT complementary oligonucleotides hybridize with little mismatch.

Example 5; Fig 25; 300pp; English.

XX The present invention describes a method (M1) for designing capture  
CC oligonucleotide probes (I) for use on a support to which complementary  
CC oligonucleotide probes (II) will hybridise with little mismatch, where  
CC (I) have melting temperatures within a narrow range. The method is useful  
CC for detecting infectious diseases caused by bacterial infectious agents  
e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal

CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and  
 CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,  
 CC Epstein-Barr virus and polio virus, and parasitic infectious agents  
 CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus  
 CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.  
 CC detecting cancer involving oncogenes, tumour suppressor genes, or genes  
 CC involved in DNA amplification, replication, recombination or repair, the  
 CC cancer is specifically associated with a gene selected from BRCA1 gene,  
 CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The  
 CC method is also used for environmental monitoring, forensics and the food  
 CC and feed industry, detecting comprises scanning (using e.g. a scanning  
 CC electron microscope and infrared microscope) the support at the  
 CC particular sites and identifying (if ligation of the oligonucleotide probe  
 CC sets occurred and correlating (using a computer) identified ligation to a  
 CC presence or absence of the target nucleotide sequences. AB182074 to  
 CC AB197546 represent oligonucleotide sequences used in the exemplification  
 CC of the present invention  
 XX  
 SQ Sequence 24 BP; 5 A; 6 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.6; DB 1; Length 24;  
 Best Local Similarity 81.8%; Pred. No. 4.8e+02;  
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1279 TGGCCAGGCGATCTGTCCAAG 1300  
 |||||  
 DB 22 TCCCTGACATCTGTCCAAG 1

## RESULT 230

ABK19257  
 ID ABK19257 standard; RNA; 17 BP.

AC ABK19257;

XX 09-APR-2002 (first entry)

DE Human ERG Amberzyme target sequence Seq ID No 1904.

XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
 KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
 KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;  
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
 KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;  
 KW amberzyme.

XX Homo sapiens.

XX WO20018124-A2.

XX 22-NOV-2001.

XX 16-MAY-2001; 2001WO-US015866.

XX 16-MAY-2000; 2000US-00572021.

XX (RIBO-) RIBOZYME PHARM INC.

XX (GLAXO) GLAXO GROUP LTD.

XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;

XX WPI; 2002-082995/11.

XX Novel polynucleotide which down regulates expression of Ets-related gene,  
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

XX Claim 4; Page 124; 149pp; English.

CC The invention relates to a nucleic acid molecule (I) which down regulates  
 CC expression of an Ets-related gene (ERG). (I) is useful for treating  
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
 CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge  
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
 CC treating a patient having a condition associated with the level of ERG,  
 CC by contacting cells of the patient with (I) under conditions suitable for  
 CC the treatment. The method comprises the use of one or more therapies  
 CC under conditions suitable for the treatment. Leukaemia or tumour  
 CC angiogenesis is treated by administering (I) to the patient in  
 CC conjunction with one or more of other therapies such as radiation or  
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
 CC cation such as Mg2+. (I) is useful for diagnosis of conditions and  
 CC diseases related to the expression of ERG, and as diagnostic tool to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of ERG RNA in a cell. (I) is useful for specifically  
 CC targeting genes that share homology with ERG gene or ERG fusion genes.  
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
 CC related PCR primers of the invention  
 XX  
 SQ Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 3.6e+02;

Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1295 CCAACGAGGAGTTCAAG 1311

|||||  
 DB 1 CCAACGGGAGUCCAAG 17

## RESULT 231

ABS75018

ID ABS75018 standard; DNA; 17 BP.

AC ABS75018;

XX 24-DEC-2002 (first entry)

XX Human PAPP-Ea associated 17-mer SEQ ID 544.

XX PAPP-E; human; pregnancy associated plasma protein E; abortive;  
 KW contraceptive; Gene therapy; vaccine; pregnancy; antenatal; diagnosis;  
 KW dysgenetic pregnancy; primer; ss.

XX Homo sapiens.

XX US2002102252-A1.

XX 01-AUG-2002.

XX 06-APR-2001; 2001US-00827998.

XX 26-MAY-2000; 2000US-0207456P.

XX (GUYK/) GU Y.

XX (SHAN/) SHANNON M E.

XX Gu Y, Shannon ME;

XX WPI; 2002-697817/75.

XX New isolated nucleic acid encoding an isoform of human pregnancy  
 PT associated plasma protein E, for preventing or aborting pregnancy.

XX Example 2; Page 146; 353pp; English.

CC This invention describes a novel isolated nucleic acid that encodes one  
 CC of three new isoforms of human pregnancy associated plasma protein E,  
 CC hPAPP-E. The products of the invention have abortive and contraceptive  
 CC activity and can be used for gene therapy or in a vaccine. The nucleic  
 CC acid, polypeptide encoded by it, or antibody to the polypeptide can be  
 CC used in pharmaceutical compositions or vaccines for preventing or  
 CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of  
 CC dysgenetic pregnancies. The nucleic acids are used as probes to assess  
 CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the  
 CC antibodies can be used to assess the expression levels of PAPP-E isoform  
 CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies  
 CC antenatally. This sequence represents an oligomer used in scanning the  
 CC human PAPP-E genes described in the disclosure of the invention

XX  
 SQ Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 17;  
 Best Local Similarity 94.1%; Pred. No. 3.6e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 287 AACTTCGTTCTGCACGG 303  
 Db 1 AACTTCGTTCTGCACGG 17

## RESULT 232

ABK57128  
 ID ABK57128 standard; RNA; 17 BP.  
 AC  
 XX  
 XX  
 DT 02-JUL-2002 (first entry)  
 DE Human CLCA1 gene enzymatic nucleic acid #1499.  
 XX Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
 KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
 KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
 KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
 KW acetylcysteine.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO200211674-A2.  
 XX  
 PD 14-FEB-2002.  
 XX  
 PF 09-AUG-2001; 2001WO-US024970.  
 XX  
 PR 09-AUG-2000; 2000US-0224383P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (SYNT) SYNTEX USA LLC.  
 PA (THOM) THOMPSON J.  
 XX  
 PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;  
 PI Grupe A;  
 XX  
 WPI; 2002-217145/27.  
 XX  
 XX Enzymatic polynucleotide that down regulates expression of chloride  
 PT channel calcium activated gene, useful for treating Chronic obstructive  
 PT pulmonary disease (COPD), chronic bronchitis and asthma.  
 PT  
 PS Claim 4; Page 96; 152pp; English.  
 XX  
 XX The invention relates to enzymatic nucleic acid molecules that down  
 CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
 CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
 CC useful as pharmaceutical agents for treating conditions such as chronic  
 CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
 CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
 CC that are related to or will respond to the levels of CLCA1 in a cell or

CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
 CC hence, are useful for treatment of a patient having a condition  
 CC associated with the level of CLCA1, where the invention further comprises  
 CC the use of one or more therapies under conditions suitable for the  
 CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
 CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
 CC nucleic acids of the invention are also used as diagnostic tools to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of CLCA1 RNA in a cell. This sequence represents an  
 CC enzymatic nucleic acid molecule of the invention

XX  
 SQ Sequence 17 BP; 4 A; 5 C; 4 G; 0 T; 4 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 17;  
 Best Local Similarity 70.6%; Pred. No. 3.6e+02;  
 Matches 12; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 1573 TCAGGAGCCGCGCTTT 1589  
 Db 1 UCAAGCAGGCCGACUUU 17

## RESULT 233

ACC65856  
 ID ACC65856 standard; DNA; 17 BP.  
 AC  
 XX  
 XX  
 DT 01-JUL-2003 (first entry)  
 XX  
 DE Murine oligonucleotide associated with tumour suppression, SEQ ID 3103.  
 XX  
 DE Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;  
 KW tumour suppression; tumour reversion; apoptosis; virus resistance;  
 KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;  
 KW schizophrenia; ss.  
 XX  
 OS Mus musculus.  
 XX  
 FN WO2003025176-A2.  
 XX  
 PD 27-MAR-2003.  
 XX  
 PF 17-SEP-2002; 2002WO-IB004210.  
 XX  
 PR 17-SEP-2001; 2001FR-00011979.  
 XX  
 PA (MOLE-) MOLECULAR ENGINES LAB.  
 XX  
 PI Telerman A, Amson R, Tuijnder M;  
 XX  
 WPI; 2003-333167/31.  
 DR  
 PT New isolated nucleic acid, useful for treating viral diseases associated  
 PT with tumors and cell degeneration, also related polypeptides, antibodies  
 PT and transfected cells.  
 XX  
 PS Disclosure; Page 393; 738pp; French.  
 XX  
 XX The present invention relates to murine oligonucleotides (ACC62754-  
 CC ACC68806), which are associated with tumour suppression, tumour  
 CC reversion, apoptosis and virus resistance. The oligonucleotides are  
 CC useful as (1) as probes and primers for detecting, identifying,  
 CC quantifying and/or amplifying nucleic acid, e.g. as one component of a  
 CC gene chip; in vitro as (anti)sense reagents; and (2) for production of  
 CC recombinant polypeptides. The oligonucleotides are useful for preparation  
 CC of pharmaceuticals for prevention and/or treatment of viral diseases that  
 CC are characterised by development of tumours or cell degeneration.  
 CC Specifically cancer but also Alzheimer's disease and schizophrenia  
 XX  
 SQ Sequence 17 BP; 6 A; 1 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 17;

```
Best Local Similarity 94.1%; Pred. No. 3.6e+02; Mismatches 1; Indels 0; Gaps 0;
Matches 16; Conservative 0;

Qy 127 GATCGGATGAAGAAGAT 143
Db 1 GATCGGATGAAGAAGAT 17

RESULT 234
AAAT12600/C
ID AAT12600 standard; DNA; 19 BP.
XX AC AAT12600;
XX DT 31-DEC-1996 (first entry)
XX DE Human Ty protease cDNA PCR primer Ty 3.2.
XX KW Interleukin-1 beta converting enzyme; ICE; protease; apoptosis;
XX KW induction; inflammation; autoimmune disease; neurodegeneration; cancer;
XX KW infection; treatment; Ty protein; polymerase chain reaction;
XX KW amplification primer; ss.
XX OS Synthetic.
XX PN WO9604387-A1.
XX PD 15-FEB-1996.
XX PF 01-AUG-1995; 95WO-FR001035.
XX PR 02-AUG-1994; 94FR-00009567.
XX PA (ROUS ) ROUSSEL-UCLAF.
XX PI Diu A, Faucheu C, Hercend T, Lalanne J, Livingston DJ, Su MS;
XX WPI; 1996-129403/13.
XX DR New DNA encoding human protease(s) that induce apoptosis - and cause
XX PT maturation of interleukin converting enzyme, useful e.g. in treating
XX PT autoimmune diseases.
XX PS Example 3; Page 26; 88pp; French.
XX CC The present sequence is that of a PCR primer used for isolating the 3'-
XX CC end of a cDNA sequence coding for the human protease designated Ty which
XX CC is related to the interleukin-1 beta converting enzyme (ICE) and which
XX CC induces apoptosis. The Ty protein has over 70% homology to Tx which
XX CC converts the p30 precursor of ICE into 20 kD and 10 kD fragments and can
XX CC be used for treating diseases which respond to ICE, e.g. inflammation.
XX CC The ability to induce apoptosis will be useful for treating cancer
XX SQ Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 4.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1436 AGGATGCCATGAAACAT 1452
Db 18 AGGATGCCATGAGACAT 2

RESULT 235
AAA82722
ID AAA82722 standard; DNA; 19 BP.
XX AC AAA82722;
XX DT 04-DEC-2000 (first entry)
XX DE cdk3 ribozyme binding site #7.

Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
Mammalia.
WO2000032765-A2.
08-JUN-2000.
06-DEC-1999; 99WO-US028772.
04-DEC-1998; 98US-0110954P.
(IMMU-) IMMUSOL INC.
Tritz R, Welch PJ, Barber JR, Robbins JM;
WPI; 2000-412314/35.
New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PCNA and Cyclin B1.
Disclosure; Page 50; 109pp; English.
The present invention relates to a hairpin or hammerhead ribozyme,
designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
Representative examples of ribozyme recognition sites are given in
CC AA82415 to AA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX SQ Sequence 19 BP; 8 A; 2 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 4.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 703 AAGGAGATCAGACTGGA 719
Db 2 AAGAAGATCAGACTGGA 18

RESULT 236
AAH57884
ID AAH57884 standard; DNA; 19 BP.
XX AC AAH57884;
XX DT 10-SEP-2001 (first entry)
XX DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:308.
XX KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX KW recognition site; target; ribozyme binding site; eye disease; vulnary;
XX KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
XX KW antischistosomal; ophthalmological; keratolytic; gene therapy; viral wart;
XX KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX KW basal cell carcinoma; seboreic wart; vitreoretinopathy; scar;
XX KW sickle cell retinopathy; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO200130362-A2.
XX PD 03-MAY-2001.
XX DE
```

PF 26-OCT-2000; 2000WO-US029500.  
 XX  
 PR 26-OCT-1999; 99US-0161532P.  
 XX  
 XX (IMMU-) IMMUSOL INC.  
 PA  
 XX Robbins JM, Tritz R;  
 PI  
 XX WPI; 2001-300427/31.  
 XX  
 DR  
 XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
 PT that cleave RNA encoding cytokines involved in inflammation, matrix  
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
 XX  
 PS Example 1; Page 94; 408pp; English.  
 XX  
 CC The present invention describes a method for treating a proliferative  
 CC skin or eye disease and scarring. The method involves administering a  
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
 CC dependent kinase, growth factor or a reductase, or administering a  
 CC nucleic acid molecule (II) comprising a promoter operably linked to a  
 CC nucleic acid segment encoding (I). (I) can have antiproliferative,  
 CC dermatological, cytostatic, antiseborrheic, antidiabetic, antickling,  
 CC ophthalmological, vulnerary, keratolytic and virucide activities, and  
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
 CC also be used for treating proliferative eye diseases such as diabetic  
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
 CC prematurity and retinal detachment, and for treating and preventing  
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
 CC scar. AAH57577 to AAH62099 represent sequences used in the  
 CC exemplification of the present invention  
 XX  
 SQ Sequence 19 BP; 8 A; 2 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.4; DB 1; Length 19;  
 Best Local Similarity 94.1%; Pred. No. 4.1e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 703 AAGAGATCAGACTGGA 719  
 DB 2 AAGAGATCAGACTGGA 18  
 |||||  
 |||||  
 RESULT 237  
 ADE29583/c  
 ID ADE29583 standard; RNA; 19 BP.  
 XX  
 AC ADE29583;  
 XX  
 XX 29-JAN-2004 (first entry)  
 DT  
 DE Mitogen activated protein kinase siRNA oligonucleotide SEQ ID NO:205.  
 XX  
 XX short interfering nucleic acid; siRNA; downregulation; inhibition;  
 KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;  
 KW cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;  
 KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;  
 KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;  
 KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;  
 KW psoriasis; inflammatory bowel disease; drug screening;  
 KW genetic engineering; pharmacogenomic; gene mapping; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX WO2003072590-A1.  
 PN  
 XX 04-SEP-2003.  
 PD  
 XX 28-JAN-2003; 2003WO-US002510.  
 PF

XX 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 XX (SIRN-) SIRNA THERAPEUTICS INC.  
 PA  
 XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;  
 PI  
 XX WPI; 2003-689980/55.  
 DR  
 XX  
 XX New short interfering nucleic acid, useful e.g. for treatment and  
 PT diagnosis of cancer, downregulates expression of mitogen-activated  
 PT protein kinase genes.  
 XX  
 PS Example 3; SEQ ID NO 205; 164pp; English.  
 XX  
 CC The present invention describes a short interfering nucleic acid (siRNA)  
 CC that downregulates expression of a mitogen-activated protein kinase  
 CC (MAPK) genes by RNA interference. Also described: (1) a method for  
 CC modulating expression of MAPK genes in cells, tissue explants or  
 CC organisms by introduction of siRNA; (2) kits for in vitro or in vivo  
 CC delivery of siRNA; (3) conjugates and/or complexes of siRNA; and (4)  
 CC vectors that express siRNA and cells containing these vectors. MAPK siRNAs  
 CC have cytostatic, anorectic, antidiabetic, antinflammatory,  
 CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,  
 CC antipsoriatic, antipsoriatic and gastrointestinal activities. The MAPK  
 CC siRNAs can be used to modulate the expression of MAPK genes, in cells,  
 CC tissue explants or organisms, e.g. for treating obesity; diabetes types I  
 CC and II; a wide range of tumours, and inflammatory diseases (asthma,  
 CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel  
 CC disease). They can also be used for drug screening; diagnosis; target  
 CC identification and validation; genetic engineering; pharmacogenomics;  
 CC studying gene function and gene mapping (e.g. of single-nucleotide  
 CC polymorphisms). The present sequence represents a MAPK siRNA which is used  
 CC in the exemplification of the present invention.  
 XX  
 SQ Sequence 19 BP; 7 A; 6 C; 6 G; 0 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.4; DB 1; Length 19;  
 Best Local Similarity 94.1%; Pred. No. 4.1e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1035 CTTTGGCCTGGCCGCGAG 1051  
 DB 19 CTTTGGCCTGGCCGCGTG 3  
 |||||  
 |||||  
 RESULT 238  
 ADE29420  
 ID ADE29420 standard; RNA; 19 BP.  
 XX  
 AC ADE29420;  
 XX  
 XX 29-JAN-2004 (first entry)  
 DT  
 DE Mitogen activated protein kinase siRNA oligonucleotide SEQ ID NO:42.  
 XX  
 XX short interfering nucleic acid; siRNA; downregulation; inhibition;  
 KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;  
 KW cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;  
 KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;  
 KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;  
 KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;  
 KW psoriasis; inflammatory bowel disease; drug screening;  
 KW genetic engineering; pharmacogenomic; gene mapping; ss.  
 XX  
 OS Synthetic.  
 XX

[illegible]

KW Alzheimer's disease; Parkinson's disease; goitre; infection; stroke;  
 KW muscular dystrophy; epilepsy; wasting disorder; PCR primer; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX WO200294870-A2.  
 XX  
 PD 28-NOV-2002.  
 XX  
 XX 02-NOV-2001; 2001WO-US051580.  
 XX  
 XX 02-NOV-2000; 2000US-0245291P.  
 PR 02-NOV-2000; 2000US-0245317P.  
 PR 07-NOV-2000; 2000US-024562P.  
 PR 08-NOV-2000; 2000US-0246871P.  
 PR 26-JAN-2001; 2001US-0264389P.  
 PR 26-JAN-2001; 2001US-0264389P.  
 PR 29-JAN-2001; 2001US-0264423P.  
 PR 29-JAN-2001; 2001US-0264799P.  
 XX  
 PA (CURA-) CURAGEN CORP.  
 XX  
 XX Grosse WM, Macdougall JR, Smithson G, Millet I, Stone DU;  
 PI Gunther E, Ellerman K, Alsbrook JP, Lepley DM, Burgess CE;  
 PI Spytek KA, Edinger SR, Gangolli EA, Gorman L, Taupier RJ, Li L;  
 PI Guo X, Fernandes ER, Vernet CM, Ichernev VI, Casman SJ, Shenoy S;  
 PI Mishra V, Furtak K, Baumgartner JC, Colman SD;  
 XX WPI; 2003-140359/13.  
 DR  
 XX  
 XX New NOVX polypeptide useful for preventing or treating NOVX-associated  
 PT disorders, e.g. cancer, cardiomyopathy, atherosclerosis or diabetes, and  
 PT in chromosome mapping, tissue typing or pharmacogenomics.  
 XX  
 XX Example 2; Page 293; 346pp; English.  
 PS  
 XX ACF03547 to ACF03570 encode the human NOVX proteins (I) given in ABR57412  
 CC to ABR57435. (I) have cytostatic, cardiant, antiinflammatory, nootropic,  
 CC immunosuppressive, antiallergic, haemostatic, anti-HIV, antidiabetic,  
 CC antiarteriosclerotic, anorectic, antiasthmatic, nephrotropic, virucide,  
 CC antiarthritic, hepatotropic, neuroprotective, antibacterial, relaxant,  
 CC antiparasitic, anticonvulsant, hypotensive, vasotropic, antiparkinsonian,  
 CC vulnary, angiogenic and antiangiogenic activities, and can be used in  
 CC gene therapy and vaccines. The NOVX polypeptides and their antibodies can  
 CC be used to determine the presence or absence of (I) in a sample. The NOVX  
 CC polypeptides, polynucleotides encoding them, and antibodies against them,  
 CC are useful in manufacturing a medicament for treating or preventing a  
 CC syndrome associated with a NOVX-associated disorder such as hypertension,  
 CC cardiomyopathy, atherosclerosis, cancer, diabetes, asthma, inflammation,  
 CC autoimmune disorders, allergies, blood disorders, obesity, acquired  
 CC immunodeficiency syndrome (AIDS), immunoglobulin (IgA) nephropathy,  
 CC cirrhosis, arthritis, Alzheimer's disease, Parkinson's disease, goitre,  
 CC infections (e.g. bacterial, viral, parasitic), stroke, muscular  
 CC dystrophy, epilepsy, and other wasting disorders associated with chronic  
 CC diseases. ACF03571 to ACF03644 represent PCR primers and probes for NOVX  
 CC sequence, which are used in an example from the present invention  
 XX  
 SQ Sequence 20 BP; 9 A; 3 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 4.3e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1240 TTCACTCTTCGATATCTT 1256  
 DB 18 TTCACTCTTCGATCTT 2  
 RESULT 241  
 AAL62434/c  
 ID AAL62434 standard; DNA; 20 BP.  
 XX  
 AC AAL62434;

XX 06-OCT-2003 (first entry)  
 XX  
 DE Human ABC transporter MHC I antisense oligonucleotide, ISIS 206615.  
 XX  
 KW ABC transporter; ABCT; major histocompatibility complex; MHC; cytostatic;  
 KW hyperproliferative; autoimmune disorder; antisense gene therapy;  
 KW inflammation; tumour formation; immunosuppressive; antimicrobial; human;  
 KW phosphorothioate backbone; antisense; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 XX Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "Phosphorothioate backbone; All cytidines are 5-  
 FT methylcytidines"  
 FT modified\_base 1..5  
 FT /\*tag= b  
 FT /mod\_base= OTHER  
 FT /note= "2'methoxyethyl nucleotides"  
 FT modified\_base 16..20  
 FT /\*tag= c  
 FT /mod\_base= OTHER  
 FT /note= "2'methoxyethyl nucleotides"  
 XX  
 XX WO2003051309-A2.  
 XX  
 XX 26-JUN-2003.  
 XX  
 XX 12-DEC-2002; 2002WO-US040101.  
 XX  
 XX 17-DEC-2001; 2001US-00024369.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX Borchers AH, Ward DT, Freiler SM;  
 XX WPI; 2003-577305/54.  
 XX  
 XX New antisense compound that hybridizes and inhibits the nucleic acid  
 PT encoding ABC transporter major histocompatibility complex 1, for treating  
 PT diseases or conditions such as a hyperproliferative or autoimmune  
 PT disorder.  
 XX  
 XX Example 15; Page 81; 112pp; English.  
 PS  
 XX The invention relates to a compound targetted to a nucleic acid molecule  
 CC encoding ABC transporter (ABCT) major histocompatibility complex (MHC) 1  
 CC where the compound specifically hybridises with the nucleic acid molecule  
 CC and inhibits expression of ATM or specifically hybridises with at least a  
 CC portion of an active site on the nucleic acid molecule. The invention is  
 CC useful for inhibiting the expression of ATM in cells or tissues. The  
 CC invention is useful for treating an animal with hyperproliferative or  
 CC autoimmune disorder. The invention is useful for diagnostics,  
 CC therapeutics, prophylaxis, as research reagents and kits, for  
 CC distinguishing functions of various members of a biological pathway and  
 CC in antisense gene therapy. The invention is also useful prophylactically  
 CC e.g., to prevent or delay infection, inflammation or tumour formation.  
 CC The present sequence is an antisense oligo targetted to human ABC  
 CC transporter MHC I DNA. This sequence is used to illustrate the method of  
 CC the invention  
 XX  
 SQ Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 4.3e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 839 TCTTGTGATACCTGGAC 855  
 | ||||| ||||| |||||



Db 18 TATTGAGTACCTGGAC 2

RESULT 242  
ADD18363/c  
ID ADD18363 standard; DNA; 20 BP.  
XX  
AC ADD18363;  
XX  
DT 15-JAN-2004 (first entry)  
XX  
DE Human MOL protein related PCR primer Seq ID198.  
XX  
KW molecule protein; MOL protein; MOLX; MOLX agonist; MOLX antagonist;  
KW cardiant; antidiabetic; antiarteriosclerotic; gene therapy;  
KW MOLX-associated disorder; cardiomyopathy; diabetes; atherosclerosis;  
KW human; PCR; primer; ss.  
XX  
OS Homo sapiens.  
XX  
DN W02003003984-A2.  
XX  
PD 16-JAN-2003.  
XX  
PF 03-JUL-2002; 2002WO-US021268.  
XX  
PR 05-JUL-2001; 2001US-0303168P.  
XX  
PR 05-JUL-2001; 2001US-0303241P.  
XX  
PR 26-SEP-2001; 2001US-0096521P.  
XX  
PR 26-SEP-2001; 2001US-00965545.  
XX  
PR 26-SEP-2001; 2001US-00966546.  
XX  
PR 01-APR-2002; 2002US-0368996P.  
XX  
PR 01-APR-2002; 2002US-0378730P.  
XX  
PR 08-MAY-2002; 2002US-0384327P.  
XX  
PR 30-MAY-2002; 2002US-0384327P.  
XX  
PR 07-JUN-2002; 2002US-0386816P.  
XX  
PR 17-JUN-2002; 2002US-00174372.  
XX  
FA (CURA-) CURAGEN CORP.  
XX  
PI Fernandes ER, Vernet CAM, Shinkets RA, Anderson DW, Padigaru M;  
PI Boldog FL, Li L, Shenoy SG, Casman SJ, Rastelli L, Alsobrook JP;  
PI Burgess CE, Grosse WM, Gusev VV, Ji W, Lepley DM, Liu X, Mezick AJ;  
PI Patraujan M, Shen L, Spaderna SK, Spytek KA, Szekeres ES;  
PI Taupier RU, Tchernev VT, Zerhusen BD, Voss EZ;  
XX  
WPI; 2003-210304/20.  
XX  
New MOLX polypeptide, nucleic acid or MOLX-specific antibody, useful for  
XX  
preparing a composition for treating or preventing a MOLX-associated  
XX  
disorder, e.g., cardiomyopathy, diabetes or atherosclerosis.  
XX  
Example 15; SEQ ID NO 198; 371pp; English.  
XX  
This invention relates to novel human nucleic acid sequences which encode  
XX  
novel molecule (MOL) proteins numbered MOL1-23, referred to generally in  
XX  
the specification as MOLX. Compounds which modulate the function of the  
XX  
MOLX proteins of the invention, MOLX agonists or antagonists, may have  
XX  
cardiant, antidiabetic or antiarteriosclerotic activities. In addition,  
XX  
the DNA and protein sequences disclosed may prove useful for gene  
XX  
therapy. The protein, nucleic acid or antibody is useful for preparing a  
XX  
composition for treating or preventing a MOLX-associated disorder, for  
XX  
example cardiomyopathy, diabetes or atherosclerosis. The present sequence  
XX  
is that of a human PCR primer which was used in the exemplification of  
XX  
the invention.  
XX  
Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;  
XX  
Query Match 0.9%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. NO. 4.3e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 865 AGCAGTACCTGGATGA 881

Db 20 AAGCAGGACCTGGATGA 4

RESULT 243  
ADD56709  
ID ADD56709 standard; DNA; 20 BP.  
XX  
AC ADD56709;  
XX  
DT 15-JAN-2004 (first entry)  
XX  
DE Human gene expression analysis multiplex Start-PCR primer #229.  
XX  
KW Gene expression; multiplex standardised reverse transcriptase-PCR;  
KW Start-PCR; high density oligonucleotide array; cDNA array;  
KW small biological sample; fine needle aspirate biopsy;  
KW laser captured microdissected material; human; primer; ss.  
XX  
OS Homo sapiens.  
XX  
DN U52003186246-A1.  
XX  
PD 02-OCT-2003.  
XX  
PF 28-MAR-2002; 2002US-00109349.  
XX  
PR 28-MAR-2002; 2002US-00109349.  
XX  
PA (WILL/) WILLEY J C.  
XX  
PA (CRAW/) CRAWFORD E L.  
XX  
PI Willey JC, Crawford EL;  
XX  
WPI; 2003-811730/76.  
XX  
Direct comparison of numerical gene expression values between samples of  
XX  
genes comprises using multiplex standardized reverse transcription-  
XX  
polymerase chain reaction.  
XX  
Example 1; SEQ ID NO 229; 59pp; English.  
XX  
The present invention relates to a method for the direct comparison of  
XX  
numerical gene expression values between samples of genes. The method  
XX  
comprises amplifying cDNA in the presence of a competitive template  
XX  
mixture and primer pairs for several genes and then amplifying aliquots  
XX  
of the PCR products using a primer pair specific for each gene. The  
XX  
method of amplification is by multiplex standardised reverse  
XX  
transcriptase-polymerase chain reaction (Start-PCR). High density  
XX  
oligonucleotide or cDNA arrays are used to measure PCR products following  
XX  
quantitative Start-PCR. The method is useful for the assessment of gene  
XX  
expression in small biological samples such as fine needle aspirate  
XX  
biopsies, and laser captured microdissected materials. The method allows  
XX  
for the standardised measurement of hundreds of genes from the same  
XX  
sample, which in prior art, could only be assessed for one gene. The  
XX  
present sequence represents a multiplex Start-PCR primer which can be  
XX  
used in the method of the present invention.  
XX  
Sequence 20 BP; 0 A; 10 C; 3 G; 7 T; 0 U; 0 Other;  
XX  
Query Match 0.9%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. NO. 4.3e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 825 GTCCCTCACCTTGCT 841  
XX  
Db 4 GTCCCTCACCTTGCT 20

RESULT 244  
AAV13323  
ID AAV13323 standard; DNA; 21 BP.  
XX



AAV13323;  
 14-MAY-1998 (first entry)  
 Sense primer Exon 5 for human 5-lipoxygenase gene.  
 Inflammatory disease; polymorphism; 5-lipoxygenase; asthma;  
 ulcerative colitis; bronchitis; sinusitis; psoriasis; rhinitis;  
 arthritis; diagnosis; treatment; PCR primer; ss.  
 Synthetic.  
 OS Homo sapiens.  
 XX WO9742347-A2.  
 XX 13-NOV-1997.  
 XX 29-APR-1997; 97WO-US007137.  
 XX 06-MAY-1996; 96US-0016890P.  
 XX 25-APR-1997; 97US-00846020.  
 XX (BGM ) BRIGHAM & WOMENS HOSPITAL.  
 XX Drazen JM, In K, Asano K, Beier D, Grobholz J;  
 XX WPI; 1997-558997/51.  
 XX Classifying patients with inflammatory disease, specifically asthma -  
 PT according to polymorphisms in 5-lipoxygenase gene regulatory region, e.g.  
 PT to identify candidates for lipoxygenase inhibitor treatment.  
 XX Example 1; Page 19; 56pp; English.  
 XX The present sequence was used in the development of a novel method for  
 CC classifying patients suffering from an inflammatory disease. The method  
 CC comprises identifying in DNA from at least 1 patient a sequence  
 CC polymorphism, as compared with the normal 5-lipoxygenase (5-LOX) gene  
 CC (AA788431), in a 5-LOX regulatory gene sequence. The method can be  
 CC applied to subjects with asthma, ulcerative colitis, bronchitis,  
 CC sinusitis, psoriasis, allergic and non-allergic rhinitis, lupus or  
 CC rheumatoid arthritis. Specifically it can be used to diagnose asthma or  
 CC susceptibility to disease, identify treatments suitable for individual  
 CC patients or assess the likely success of treatment  
 XX Sequence 21 BP; 6 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
 XX Query Match 0.9%; Score 15.4; DB 1; Length 21;  
 XX Best Local Similarity 94.1%; Pred. No. 4.5e+02;  
 XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 992 AGAAGCTGCTCATCAAC 1008  
 XX |||||  
 DB 4 AGAAGCTGCTCATCAAC 20  
 RESULT 245  
 AAV20817/C  
 ID AAV20817 standard; DNA; 21 BP.  
 XX  
 AC AAV20817;  
 XX  
 XX 16-JUL-1998 (first entry)  
 DT Primer for Human haematopoietic stem cell growth factor.  
 DE  
 DE Haematopoietic stem cell growth factor; SCGF; burst-promoting activity;  
 KW BPA; granulocyte macrophage colony stimulating activity; gene therapy;  
 KW GPA; haematopoietic cell disorder; bone marrow inhibition; human;  
 KW PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.

XX WO9808869-A1.  
 XX 05-MAR-1998.  
 XX 27-AUG-1997; 97WO-JP002985.  
 XX 27-AUG-1996; 96JP-00262252.  
 XX 24-MAR-1997; 97JP-00087242.  
 XX 07-JUL-1997; 97WO-JP002349.  
 XX (KYOW ) KYOWA HAKKO KOGYO KK.  
 XX Hiraoka A, Sugimura A, Mio H;  
 XX WPI; 1998-179383/16.  
 XX Haematopoietic stem cell growth factor - useful for, e.g. treatment and  
 PT diagnosis of haematopoietic cell abnormalities and bone marrow  
 PT inhibition.  
 XX Example 21; Page 49; 85pp; Japanese.  
 XX This sequence is a primer for DNA encoding the human haematopoietic stem  
 CC cell growth factor (SCGF) of the invention. The polypeptide of the  
 CC invention is of mammalian origin and has haematopoietic stem cell growth  
 CC factor SCGF activity, including burst-promoting activity (BPA) and  
 CC granulocyte macrophage colony stimulating activity (GPA). The products  
 CC can be used for treatment, diagnosis and analysis of haematopoietic cell  
 CC disorders and bone marrow inhibition, e.g. by cytotoxic anticancer agents  
 CC such as 5-fluorouracil. The products can also be used for amplification  
 CC of haematopoietic cells in vitro, e.g. for use in marrow grafting and  
 CC gene therapy by insertion of SCGF gene using a suitable therapeutic  
 CC vector  
 XX Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;  
 XX Query Match 0.9%; Score 15.4; DB 1; Length 21;  
 XX Best Local Similarity 94.1%; Pred. No. 4.5e+02;  
 XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 614 CCTCATTTAAGCTGGAC 630  
 XX |||||  
 DB 19 CCTGCATTAAAGCTGGAC 3  
 RESULT 246  
 AAF97411  
 ID AAF97411 standard; DNA; 21 BP.  
 XX  
 AC AAF97411;  
 XX  
 XX 06-JUN-2001 (first entry)  
 DT  
 XX Human gene single nucleotide polymorphism #2172.  
 DE  
 XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;  
 KW polymorphism; vascular disease; coronary artery disease; forensics;  
 KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;  
 KW pulmonary embolism; paternity test; ds.  
 XX  
 OS Homo sapiens.  
 XX Key Location/Qualifiers  
 FH Variation replace(11,A)  
 FT /\*tag= a  
 FT /standard\_name= "single nucleotide polymorphism"  
 XX WO200118250-A2.  
 XX 15-MAR-2001.  
 XX 07-SEP-2000; 2000WO-US024503.  
 PF

XX 10-SEP-1999; 99US-0153357P.  
 PR 26-JUN-2000; 2000US-0220947P.  
 PR 16-AUG-2000; 2000US-0225724P.  
 XX  
 PA (WHEED ) WHITEHEAD INST BIOMEDICAL RES.  
 PA (MILL-) MILLENNIUM PHARM INC.  
 XX  
 PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GO, McCarthy JJ;  
 PI WPI; 2001-226749/23.  
 DR  
 XX Nucleic acids comprising single nucleotide polymorphisms, useful in  
 PT applications such as forensics, paternity testing, medicine, genetic  
 PT analysis and phenotype correlations to diseases such as diabetes and  
 PT atherosclerosis.  
 XX  
 XX Example; Page 197; 242pp; English.  
 XX  
 CC The present invention provides a method of diagnosing a vascular disease  
 CC in an individual, involving determining the sequence at various  
 CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4  
 CC genes. The sequences at a number of polymorphic sites are also provided  
 CC in the specification. In particular, the method can be used in the  
 CC diagnosis of atherosclerosis, myocardial infarction, coronary heart  
 CC disease, stroke, peripheral vascular diseases, venous thromboembolism and  
 CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also  
 CC useful in forensics, paternity testing, genetic analysis and phenotype  
 CC correlations to diseases. The present sequence is an example of one of  
 CC the human gene SNPs shown in the specification  
 XX  
 XX Sequence 21 BP; 6 A; 4 C; 9 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.9%; Score 15.4; DB 1; Length 21;  
 Best Local Similarity 94.1%; Pred. No. 4.5e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 715 CTGGACATGAGAGGG 731  
 |||||  
 DB 4 CTGGACGTGAAGAGGG 20  
 RESULT 247  
 AAD38761  
 ID AAD38761 standard; DNA; 21 BP.  
 XX  
 AC AAD38761;  
 DT  
 DE 23-SEP-2002 (first entry)  
 XX  
 DE Escherichia coli p0157 plasmid DNA amplifying PCR primer, stce3/1773.  
 XX  
 KW p0157 plasmid; stceE protein; haemolytic uraemic syndrome; proteolysis;  
 KW Ci-esterase inhibitor; enterohaemorrhagic pathogen; antiinflammatory;  
 KW colitis; antibacterial; antidiarrhoeic; PCR; primer; ss.  
 XX  
 OS Escherichia coli.  
 XX  
 XX WO200234918-A2.  
 PN  
 XX  
 PD 02-MAY-2002.  
 XX  
 XX 26-OCT-2001; 2001WO-US047719.  
 XX  
 XX 26-OCT-2000; 2000US-0243675P.  
 XX  
 PA (WISC ) WISCONSIN ALUMNI RES FOUND.  
 XX  
 PI Welch RA, Latham WW;  
 XX  
 DR WPI; 2002-471441/50.  
 XX  
 XX New p0157 plasmid-specified polypeptide found in Escherichia coli and

PT other enterohaemorrhagic Escherichia coli, that binds to and cleaves Ci-  
 PT esterase inhibitor, useful for diagnosing and treating colitis.  
 XX  
 XX Example; Page 24; 58pp; English.  
 XX  
 CC The present invention relates to novel p0157 plasmid-specified proteins  
 CC found in Escherichia coli EDL933 and other enterohaemorrhagic E. coli,  
 CC designated StcE, that bind to and cleave Ci-esterase inhibitor. Sequences  
 CC of the invention are useful for diagnosing, preventing or treating  
 CC haemolytic uraemic syndrome or colitis in a subject infected with an  
 CC enterohaemorrhagic pathogen expressing inhibitor protein. They are useful  
 CC for testing a molecule for the ability to reduce proteolysis of Ci  
 CC esterase inhibitor by inhibitor protein. The present sequence is a PCR  
 CC primer which is used for amplifying E. coli p0157 plasmid DNA encoding  
 CC StcE protein. This primer is used in the exemplification of the invention  
 XX  
 XX Sequence 21 BP; 5 A; 4 C; 9 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.9%; Score 15.4; DB 1; Length 21;  
 Best Local Similarity 94.1%; Pred. No. 4.5e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 1220 CGGTGGAGGACAGCTA 1236  
 |||||  
 DB 1 CGGTGGAGGACAGCTA 17  
 RESULT 248  
 AAX57349  
 ID AAX57349 standard; DNA; 23 BP.  
 XX  
 AC AAX57349;  
 XX  
 DT 22-JUL-1999 (first entry)  
 XX  
 DE Parvovirus B19 PCR primer 2.  
 XX  
 KW Detection; viral concentration; blood plasma; serum; PCR sensitivity;  
 KW extraction; amplification; detection; PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Parvovirus.  
 XX  
 XX EP922771-A2.  
 PN  
 XX 16-JUN-1999.  
 PD  
 XX 03-NOV-1998; 98EP-00120799.  
 PF  
 XX 28-NOV-1997; 97DE-01052898.  
 PR  
 XX (CENT-) CENTEON PHARMA GMBH.  
 PA  
 XX Weimer T, Groener A;  
 PI WPI; 1999-329400/28.  
 DR  
 XX Process to detect high concentrations of virus in blood plasma or serum,  
 PT by restricting the sensitivity of PCR.  
 PT  
 XX Example 1; Page 6; 8pp; German.  
 PS  
 XX This invention describes a novel method for for detection of high viral  
 CC concentrations in blood plasma or serum by restriction of PCR sensitivity  
 CC through suboptimal nucleic acid extraction, amplification and detection of  
 CC conditions. The method described is used to detect high concentrations of  
 CC parvovirus in the blood plasma or serum of humans. The method detects  
 CC parvovirus DNA with a content in humans of greater than 106 to 107 genome  
 CC equivalents  
 XX  
 XX Sequence 23 BP; 6 A; 10 C; 4 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.9%; Score 15.4; DB 1; Length 23;

Best Local Similarity 94.1%; Pred. No. 5e+02; Mismatches 0; Conservative 0; Indels 1; Gaps 0;

QY 1226 AGGCACGCTACACTTC 1242  
DB 2 AGGCACGCTACACTTC 18

RESULT 249  
ADE36722/c  
ID ADE36722 standard; DNA; 23 BP.  
XX ADE36722;  
XX 29-JAN-2004 (first entry)  
DE DE3-1 plasmid construction related oligonucleotide SEQ ID NO:11.  
XX neoplasm; Erbb-3; immune response; cytostatic; gene therapy; cancer;  
KW human; ss.  
XX Synthetic.  
OS Homo sapiens.  
XX WO2003080835-A1.  
XX 02-OCT-2003.  
XX 26-MAR-2003; 2003WO-CN000217.  
XX 26-MAR-2002; 2002CN-00116259.  
XX (ZENS-) ZENSUN SHANGHAI SCI TECH LTD.  
XX Zhou M;  
XX WPI; 2003-876924/81.  
XX Use of an Erbb-3 protein, a nucleic acid encoding an Erbb-3 protein or  
PT their fragments, for treating, preventing or delaying neoplasms (e.g.  
PT urethra, uterus, vagina or vulva neoplasm) or cancers (e.g. breast, ovary  
PT or colon cancer).  
XX Example; SEQ ID NO 11; 68pp; English.  
XX The present invention describes a method for treating, preventing or  
CC delaying neoplasm in a mammal. The method comprises administering an Erbb  
CC -3 protein, a nucleic acid encoding an Erbb-3 protein or their  
CC functional fragments, where an immune response is generated against the  
CC neoplasm. Erbb-3 has cytostatic activity, and can be used in gene  
CC therapy. The method is useful for treating, preventing or delaying  
CC neoplasms (e.g. adrenal gland, anus, auditory nerve, bile ducts, bladder,  
CC bone, brain, breast, buccal, central nervous system, cervix, colon, ear,  
CC endometrium, oesophagus, eye, eyelids, fallopian tube, gastrointestinal  
CC tract, head and neck, heart, kidney, larynx, liver, lung, mandible,  
CC mandibular condyle, maxilla, mouth, nasopharynx, nose, oral cavity,  
CC ovary, pancreas, parotid gland, penis, pinna, pituitary, prostate gland,  
CC rectum, retina, salivary glands, skin, small intestine, spinal cord,  
CC stomach, testes, thyroid, tonsil, urethra, uterus, vagina,  
CC vestibulocochlear nerve, or vulva neoplasm), or cancers (breast, ovary,  
CC stomach, prostate, colon and lung cancer). The present sequence  
CC represents an oligonucleotide used in the construction of a plasmid  
CC comprising Erbb-3, which is used in an example from the present  
CC invention.  
XX Sequence 23 BP; 7 A; 12 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.4; DB 1; Length 23;  
Best Local Similarity 94.1%; Pred. No. 5e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 229 AGTGGTGGTGGCGG 245  
|||||

Db 20 AGTGGTGGTGGTGG 4

RESULT 250  
AAT11977/c  
ID AAT11977 standard; DNA; 20 BP.  
XX AAT11977;  
AC AAT11977;  
XX 25-MAR-2003 (revised)  
DT 13-MAR-1996 (first entry)  
XX CMV antisense oligonucleotide (ISIS 5477).  
XX antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;  
KW intermediate early complex; IE1; IE2; DNA polymerase gene; ss.  
XX Synthetic.  
XX OS  
XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /\*tag= a  
FT /note= "phosphorothioate backbone"  
XX US5442049-A.  
XX 15-AUG-1995.  
XX 25-JAN-1993; 93US-00009263.  
XX 19-NOV-1992; 92US-00927506.  
XX (ISIS-) ISIS PHARM INC.  
XX Baker B, Draper K, Anderson K;  
XX WPI; 1995-292538/38.  
XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to  
PT a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and  
PT treatment of CMV diseases.  
XX Example 10; Col 17; 66pp; English.  
XX AAT11971-84 are antisense oligonucleotides (ONs) against human  
CC cytomegalovirus (CMV) that displayed activities of at least 50 % of  
CC control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal  
CC mismatches could be tolerated without loss of antiviral activity.  
CC Antisense ONs targeting CMV DNA or RNA coding for the IE1, IE2 or DNA  
CC polymerase proteins have been shown to be effective in therapy,  
CC prophylaxis and diagnosis of CMV infection. The ONs may be modified to  
CC reduce nuclease resistance and to increase their efficacy. Modifications  
CC include phosphorothioate backbones, alkyl and halogen-substituted sugar  
CC moieties at the 2' position. (Updated on 25-MAR-2003 to correct Pf  
CC field.)  
XX Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149  
|||||

DB 20 CGCAGAGAGAGAGCAACG 1

RESULT 251  
AAT01675/c  
ID AAT01675 standard; DNA; 20 BP.  
XX AAT01675;  
AC AAT01675;  
XX

DT 17-DEC-1995 (first entry)  
 XX Peptide nucleic acid targeting CMV IE2 nuc sig 2.  
 DE  
 XX  
 XX Peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;  
 KW antiviral; diagnostic; ss.  
 KW  
 XX Synthetic.  
 OS  
 XX  
 XX Key Location/Qualifiers  
 FT misc\_feature 1..20  
 FT /tag a  
 FT /note "at least one (and preferably all) of the backbone  
 FT subunits are composed of amide units, so that the  
 FT oligomer consists of the nucleobases attached covalently  
 FT to a polyamide backbone"  
 FT  
 XX  
 PN WO9504748-A1.  
 XX  
 XX 16-FEB-1995.  
 PD  
 XX 09-AUG-1994; 94WO-US009039.  
 XX  
 XX 09-AUG-1993; 93US-00104438.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Anderson KP, Crooke ST, Mirabelli CX, Ecker DJ, Cowsett LM;  
 FI  
 XX WPI; 1995-090841/12.  
 DR  
 XX  
 XX New peptide nucleic acid oligomers hybridisable to cytomegalovirus or  
 PT papilloma-virus - are stable anti-sense molecules with high affinity for  
 PT single stranded DNA, used for treating infections.  
 PT  
 XX  
 PS Claim 2; Page 44; 65pp; English.  
 XX  
 XX New oligomers are claimed which (A) have at least one peptide nucleic  
 CC acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5'  
 CC untranslated region, intron/exon (I/E) junction or coding sequence of  
 CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or  
 CC hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a  
 CC papillomavirus. The PNAs can be used to target RNA and single stranded  
 CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence  
 CC they may be used therapeutically for modulating cytomegalovirus and  
 CC papillomavirus processes and also as diagnostics (e.g., as probes for  
 CC specific mRNAs). PNA oligomers have high affinity for complementary  
 CC single stranded DNA. They are also able to form triple helices in which a  
 CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds  
 CC with the resulting double helix or with the first PNA strand. The PNAs  
 CC possess no significant charge and are water soluble, which facilitates  
 CC cellular uptake. Further, since they contain amides of non-biological  
 CC amino acids, they are biostable and resistant to enzymatic degradation by  
 CC proteases. The present sequence targets CMV IE2 nuclear localisation  
 CC signal 2  
 CC  
 XX Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.9%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 130 CGGATGAGAGACATCAACG 149  
 DB 20 CGCAGAGAGAGACGAAACG 1  
 XX  
 RESULT 252  
 AAX63365/C  
 ID AAX63365 standard; DNA; 20 BP.  
 XX  
 AC AAX63365;  
 XX  
 XX Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;  
 KW cytomegalovirus; inhibition; replication; sugar modification;  
 KW phosphorothioate; infection; retinitis; ss.  
 XX  
 OS Synthetic.

DT 16-JUL-1999 (first entry)  
 XX Granule bound starch synthase primer #2.  
 DE  
 XX  
 XX Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate;  
 KW granule bound starch synthase; hammerhead ribozyme; hairpin ribozyme;  
 KW modulation; gene expression; transgenic plant; cleavage; canola plant;  
 KW caffeine synthesis; coffee plant; nicotine production; tobacco;  
 KW fruit ripening; flower pigmentation; lignin production; ss.  
 XX  
 XX Synthetic.  
 OS Zea mays.  
 XX  
 PN WO9710328-A2.  
 XX  
 PD 20-MAR-1997.  
 XX  
 XX 12-JUL-1996; 96WO-US011689.  
 PF  
 XX 13-JUL-1995; 95US-0001135P.  
 PR  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (DOWC) DOWELANCO.  
 PA  
 XX Zwick MG, Edington BE, Mcswiggen JA, Merlo PAO, Guo L, Skokut TA;  
 PI Young SA, Folkerts O, Merlo DJ;  
 XX WPI; 1997-202224/18.  
 DR  
 XX Ribozyme which modulates plant gene expression - preferably modulates  
 PT expression of DELTA-9 desaturase or granule bound starch synthase in  
 PT maize or canola.  
 PT  
 XX Example 27; Page 51; 155pp; English.  
 XX  
 XX The present invention describes an enzymatic nucleic acid molecule (I)  
 CC with RNA cleaving activity, which modulates the expression of a plant  
 CC gene. Also described is a gene comprising a cDNA sequence encoding maize  
 CC Delta-9 desaturase. (I) can be used to modulate expression of a gene.  
 CC Preferably Delta-9 desaturase or a granule bound starch synthase (GBSS)  
 CC gene, in a plant (preferably a maize or canola plant). (I) can be used to  
 CC modulate caffeine synthesis in a coffee plant, nicotine production in a  
 CC tobacco plant, fruit ripening processes in an apple, tomato, pear, plum  
 CC or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or  
 CC marigold plant or lignin production in a tobacco, aspen, poplar or pine  
 CC plant  
 XX  
 XX Sequence 20 BP; 3 A; 5 C; 7 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.9%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 377 CTTGAGCCAGTCCTCGGAT 396  
 DB 20 CATCAGCCAGCGATCGGAT 1  
 XX  
 RESULT 253  
 AAX17949/C  
 ID AAX17949 standard; DNA; 20 BP.  
 XX  
 XX AAX17949;  
 AC  
 XX 11-MAY-1999 (first entry)  
 DT  
 XX Anti-CMV oligonucleotide #15103.  
 DE  
 XX Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;  
 KW cytomegalovirus; inhibition; replication; sugar modification;  
 KW phosphorothioate; infection; retinitis; ss.  
 XX  
 OS Synthetic.

OS Human herpesvirus 5.  
XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /tag= a  
FT /note= "contains phosphorothioate internucleotide  
FT linkages"  
FT modified\_base 1..20  
FT /tag= b  
FT /note= "all C bases are 5'-methyl-cytosine"  
FT modified\_base 1..6  
FT /tag= b  
FT /note= "2'-methoxyethoxy sugar moieties"  
FT modified\_base 14..20  
FT /tag= b  
FT /note= "2'-methoxyethoxy sugar moieties"  
FT modified\_base 1..6  
FT /tag= b  
FT /note= "2'-methoxyethoxy sugar moieties"  
XX WO9845314-A1.  
XX 15-OCT-1998.  
XX 07-APR-1998; 98WO-US006895.  
XX 09-APR-1997; 97US-00838715.  
XX (ISIS-) ISIS PHARM INC.  
XX Draper KG, Kisner DL, Anderson KP, Chapman S;  
XX WPI; 1998-568330/48.  
XX New antisense oligonucleotides that target cytomegalovirus nucleic acid -  
PT particularly including 2-methoxyethoxy sugar modifications, especially  
PT for treating viral retinitis, with long-lasting retention in the retina.  
XX Claim 7; Page 32; 99pp; English.  
XX This antisense oligonucleotide is targeted to a nucleic acid sequence in  
XX the IE (immediate early) 2 region of the cytomegalovirus (CMV) genome and  
XX is able to inhibit CMV replication. Optionally the oligonucleotide  
XX include at least one 2'-(2-methoxyethoxy) sugar modification or  
XX phosphorothioate internucleotide linkages. The oligonucleotides (AA17861  
XX -X17924) are also used to inhibit CMV infections (by in vivo or in vitro  
XX contact with cells, tissues or body fluids), especially to treat or  
XX prevent CMV infections, particularly retinitis  
XX Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;  
XX Query Match 0.9%; Score 15.2; DB 1; Length 20;  
XX Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 130 CGGATGAAGAAGATCAACG 149  
DB 20 CGCAGAGAGAGCAACG 1  
RESULT 254  
AA17894/c  
ID AAX17894 standard; DNA; 20 BP.  
XX AAX17894;  
XX 11-MAY-1999 (first entry)  
XX Anti-CMV oligonucleotide #5477.  
XX Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;  
XX cytomegalovirus; inhibition; replication; sugar modification;  
XX phosphorothioate; infection; retinitis; ss.  
XX Synthetic.  
XX Human herpesvirus 5.  
OS

XX WO9845314-A1.  
XX 15-OCT-1998.  
XX 07-APR-1998; 98WO-US006895.  
XX 09-APR-1997; 97US-00838715.  
XX (ISIS-) ISIS PHARM INC.  
XX Draper KG, Kisner DL, Anderson KP, Chapman S;  
XX WPI; 1998-568330/48.  
XX New antisense oligonucleotides that target cytomegalovirus nucleic acid -  
PT particularly including 2-methoxyethoxy sugar modifications, especially  
PT for treating viral retinitis, with long-lasting retention in the retina.  
XX Claim 7; Page 30; 99pp; English.  
XX Antisense oligonucleotides (AA17861-X17924) are targeted to a nucleic  
XX acid (AA17925-X17948) encoding IE (immediate early) 1 or 2, or DNA  
XX polymerase of cytomegalovirus (CMV) and are able to inhibit CMV  
XX replication. Optionally the oligonucleotides include at least one 2'-(2-  
XX methoxyethoxy) sugar modification or phosphorothioate internucleotide  
XX linkages. The oligonucleotides are used to inhibit CMV infections (by in  
XX vivo or in vitro contact with cells, tissues or body fluids), especially  
XX to treat or prevent CMV infections, particularly retinitis  
XX Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;  
XX Query Match 0.9%; Score 15.2; DB 1; Length 20;  
XX Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 130 CGGATGAAGAAGATCAACG 149  
DB 20 CGCAGAGAGAGCAACG 1  
RESULT 255  
AA178135  
ID AAZ18135 standard; DNA; 20 BP.  
XX AAZ18135;  
XX 11-OCT-1999 (first entry)  
XX STK 7 gene specific primer.  
XX Genetic proximity; gene expression; cell characterisation; homeobox gene;  
XX genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;  
XX kinase gene; protein phosphatase; P450; steroid receptor; cadherin;  
XX primer; ss.  
XX Synthetic.  
XX Homo sapiens.  
XX WO9934016-A2.  
XX 08-JUL-1999.  
XX 28-DEC-1998; 98WO-IL000625.  
XX 29-DEC-1997; 97IL-00122793.  
XX 16-OCT-1998; 98IL-00126627.  
XX (GENE-) GENENA LTD.  
XX Vider B;  
XX WPI; 1999-419113/35.  
XX

DR P-PSDB; AAY14670.

XX Identifying and characterizing cells by comparing the pattern of gene

PT expression in a selected gene family.

XX PS

XX Claim 4; Page 44; 102pp; English.

XX

CC The invention provides a new method for identifying and characterizing

CC cells. The method for determining the genetic proximity of a first cell

CC and a second cell comprises: (a) obtaining the first cell and the second

CC cell; (b) determining in the first cell and the second cell the pattern

CC of expression of genes in a selected gene family; and (c) calculating a

CC proximity index using a specified formula. The methods can be used for

CC characterizing cells, e.g. for determining the origin of a cell, its

CC genetic status, whether it carries a genetic defect, or whether it is

CC transformed. They can be used for detecting a selected genetic defect in

CC an individual, e.g. a fetus. They can also be used for determining the

CC effect of a selected treatment on a test cell. They can also be used for

CC obtaining cells capable of expressing an homeobox related desired

CC property. The method uses reverse transcriptase polymerase chain reaction

CC (RT-PCR) for determining the pattern of gene expression in a selected

CC gene family. Sequences AA217803-218342 represent primers that can be used

CC in the RT-PCR reactions to determine the pattern of gene expression. The

CC gene family can be selected from a set of homeobox genes, kinase genes,

CC protein phosphatase genes, P450 enzyme genes, steroid receptor

CC superfamily genes or cadherin superfamily genes

XX

SQ Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 4.7e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 970 CTACACCGAGACCTCAAGCC 989

DB 1 CTGCACCGTGACCTCAAGAC 20

RESULT 256

AAZ18149

ID AAZ18149 standard; DNA; 20 BP.

XX

AC AAZ18149;

XX

DT 11-OCT-1999 (first entry)

XX

DE STK 14 gene specific primer.

XX

KW Genetic proximity; gene expression; cell characterisation; homeobox gene;

KW Genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;

KW Kinase gene; protein phosphatase; P450; steroid receptor; cadherin;

KW primer; ss.

XX

OS Synthetic.

OS Homo sapiens.

XX

PN WO9934016-A2.

XX

PD 08-JUL-1999.

XX

PF 28-DEC-1998; 98WO-IL000625.

XX

PR 29-DEC-1997; 97IL-00122793.

PR 16-OCT-1998; 98IL-00126627.

XX

PA (GENE-) GENENA LTD.

XX

PI Vidar B;

XX

DR WPI; 1999-419113/35.

DR P-PSDB; AAY14684.

XX

PT Identifying and characterizing cells by comparing the pattern of gene

PT expression in a selected gene family.

XX

XX Claim 4; Page 45; 102pp; English.

XX

CC The invention provides a new method for identifying and characterising

CC cells. The method for determining the genetic proximity of a first cell

CC and a second cell comprises: (a) obtaining the first cell and the second

CC cell; (b) determining in the first cell and the second cell the pattern

CC of expression of genes in a selected gene family; and (c) calculating a

CC proximity index using a specified formula. The methods can be used for

CC characterising cells, e.g. for determining the origin of a cell, its

CC genetic status, whether it carries a genetic defect, or whether it is

CC transformed. They can be used for detecting a selected genetic defect in

CC an individual, e.g. a fetus. They can also be used for determining the

CC effect of a selected treatment on a test cell. They can also be used for

CC obtaining cells capable of expressing an homeobox related desired

CC property. The method uses reverse transcriptase polymerase chain reaction

CC (RT-PCR) for determining the pattern of gene expression in a selected

CC gene family. Sequences AA217803-218342 represent primers that can be used

CC in the RT-PCR reactions to determine the pattern of gene expression. The

CC gene family can be selected from a set of homeobox genes, kinase genes,

CC protein phosphatase genes, P450 enzyme genes, steroid receptor

CC superfamily genes or cadherin superfamily genes

XX

SQ Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 4.7e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 970 CTACACCGAGACCTCAAGCC 989

DB 1 CTGCACCGTGACCTCAAGAC 20

RESULT 257

AAZ18163

ID AAZ18163 standard; DNA; 20 BP.

XX

AC AAZ18163;

XX

DT 11-OCT-1999 (first entry)

XX

DE STK 21 gene specific primer.

XX

KW Genetic proximity; gene expression; cell characterisation; homeobox gene;

KW Genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;

KW Kinase gene; protein phosphatase; P450; steroid receptor; cadherin;

KW primer; ss.

XX

OS Synthetic.

OS Homo sapiens.

XX

PN WO9934016-A2.

XX

PD 08-JUL-1999.

XX

PF 28-DEC-1998; 98WO-IL000625.

XX

PR 29-DEC-1997; 97IL-00122793.

PR 16-OCT-1998; 98IL-00126627.

XX

PA (GENE-) GENENA LTD.

XX

PI Vidar B;

XX

DR WPI; 1999-419113/35.

DR P-PSDB; AAY14698.

XX

PT Identifying and characterizing cells by comparing the pattern of gene

PT expression in a selected gene family.

XX

PS Claim 4; Page 45; 102pp; English.

XX The invention provides a new method for identifying and characterising  
 CC cells. The method for determining the genetic proximity of a first cell  
 CC and a second cell comprises: (a) obtaining the first cell and the second  
 CC cell; (b) determining in the first cell and the second cell the pattern  
 CC of expression of genes in a selected gene family; and (c) calculating a  
 CC proximity index using a specified formula. The methods can be used for  
 CC characterising cells, e.g. for determining the origin of a cell, its  
 CC genetic status, whether it carries a genetic defect, or whether it is  
 CC transformed. They can be used for detecting a selected genetic defect in  
 CC an individual, e.g. a fetus. They can also be used for determining the  
 CC effect of a selected treatment on a test cell. They can also be used for  
 CC obtaining cells capable of expressing an homeobox related desired  
 CC property. The method uses reverse transcriptase polymerase chain reaction  
 CC (RT-PCR) for determining the pattern of gene expression in a selected  
 CC gene family. Sequences AAZ17803-218342 represent primers that can be used  
 CC in the RT-PCR reactions to determine the pattern of gene expression. The  
 CC gene family can be selected from a set of homeobox genes, kinase genes,  
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor  
 CC superfamily genes or cadherin superfamily genes  
 XX  
 SQ Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 970 CTACACCGAGACTCAAGCC 989  
 DB 1 CTGCACCGTGAAGCTCAAGAC 20

RESULT 258  
 AAX86355  
 ID AAX86355 standard; DNA; 20 BP.

AC AAX86355;

DT 29-SEP-1999 (first entry)

DE PCR primer used to amplify the penicillin G amidase gene.

XX groEL gene; expression vector; tac promoter; groEL; intergenic region;  
 KW cephalosporin amidase; penicillin G amidase; PCR primer; ss.

XX Synthetic.  
 OS Escherichia coli.

XX WO9931220-A1.

XX 24-JUN-1999.

PF 11-DEC-1998; 98WO-US026343.

PR 16-DEC-1997; 97US-0069751P.

XX (BRIM ) BRISTOL-MYERS SQUIBB CO.

XX Liu SW, Franceschini T;

XX WPI; 1999-457923/38.

XX New high expression vector for Escherichia coli useful for expression of  
 PT heterologous genes.

PS Disclosure; Page 10; 37pp; English.

XX PCR primers AAX86355-56 were used to amplify the penicillin G amidase  
 CC gene Escherichia coli. The amplified fragment was used to construct the  
 CC expression vector of the invention. This expression vector comprises the  
 CC tac promoter, the groEL intergenic region of DNA and the start codon of  
 CC the groEL gene. Expression of the groEL and/or groES proteins along with  
 CC the expressed, heterologous protein of interest leads to stabilization of

CC the expressed protein. The new vectors yield higher titers of expressed  
 CC enzymes relative to prior art vectors such as T7 RNA polymerase-based pET  
 CC vectors. Also, when constitutive promoters are used in the new vectors,  
 CC an inducer is not required to trigger expression of the heterologous  
 CC protein. This may decrease the cost of the production of the protein and  
 CC simplifies the fermentation process. The new vectors are used to obtain  
 CC high yields of heterologous proteins expressed in microbial host cells,  
 CC especially Escherichia coli. In particular, the new vectors are used to  
 CC express the enzymes cephalosporin amidase or penicillin G amidase  
 XX

SQ Sequence 20 BP; 10 A; 2 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1433 CAGAGGATGCCATCAACAT 1452  
 DB 1 CAGAGGATATCATCAAAAAT 20

RESULT 259  
 AAX60861/c

ID AAX60861 standard; DNA; 20 BP.

AC AAX60861;

DT 09-AUG-1999 (first entry)

DE CDK4 specific antisense oligo HYB103173.

XX Cyclin-dependent kinase 4; CDK4; antisense; G1/S phase transition;  
 KW cancerous cell; cyclin D1; P16; tumour growth; ss.

XX Synthetic.

XX WO9927087-A1.

XX 03-JUN-1999.

PF 21-NOV-1997; 97WO-US022234.

PR 21-NOV-1997; 97WO-US022234.

XX (HYBR-) HYBRIDON INC.

XX Morrissey D, Von Hofe B;

XX WPI; 1999-357832/30.

XX Antisense oligonucleotide targeted to cyclin-dependent kinase 4 gene,  
 PT useful for regulating G1 to S phase transition in a cell.

XX Claim 3; Page 17; 60pp; English.

XX Sequences AAX60831-864 represent synthetic oligonucleotides complementary  
 CC to a cyclin-dependent kinase 4 (CDK4) nucleic acid. The antisense  
 CC oligonucleotides are used to regulate G1/S phase transition, especially  
 CC to inhibit growth of cancerous cells. The oligonucleotides can be  
 CC administered in the form of a therapeutic composition to treat a mammal  
 CC afflicted with a tumour associated with aberrant expression of CDK4,  
 CC cyclin D1, or P16, to reduce tumour growth

SQ Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1086 GGTGGTGACACTCTGTGATCC 1105

DB 20 GGTGTGTACTCTGTGATCC 1

```
RESULT 260
AA27716
ID AAX27716 standard; DNA; 20 BP.
XX
XX
AC AAX27716;
XX
XX 01-JUN-1999 (first entry)
XX
XX PCR primer hgh S2.1.
XX
XX Porcine; totipotent cell; pluripotent; primordial germ cell; PGC;
XX porcine stem cell factor; transgenic pig; xenotransplantation; ES;
XX cell differentiation; gene regulation; embryonic development; PSCF;
XX embryonic stem cell; steel factor; PCR primer; ss.
XX
XX Synthetic.
XX
XX WC9909141-A1.
XX
XX 25-FEB-1999.
XX
XX 13-AUG-1998; 98WO-US016782.
XX
XX 14-AUG-1997; 97US-0055643P.
XX
XX (BIOT-) BIOTRANSPLANT INC.
XX
XX Brem G, Baetscher M;
XX
XX WPI; 1999-181024/15.
XX
XX Production of pluripotent or totipotent porcine stem cell lines - by long
XX term culture of transfected murine STO feeder cells with a porcine stem
XX cell factor, useful for, e.g. xenotransplantation.
XX
XX Example 4; Page 34; 80pp; English.
XX
XX The invention relates to an isolated porcine totipotent cell. A porcine
XX pluripotent or totipotent cell, can be produced by culturing either a
XX porcine primordial germ cell (PGC) or other totipotent cell with a
XX porcine stem cell factor (PSCF). Cell lines produced are useful for the
XX generation of transgenic pigs, and for xenotransplantation. They are also
XX useful for studying cell differentiation and gene regulation during
XX embryonic development. The use of totipotent or pluripotent cells, like
XX embryonic stem (ES) cells, in a totipotent-cell-embryo-injection-method
XX enables specific gene alterations, which allow the study of specific gene
XX function in a resulting chimeric animal line
XX
XX Sequence 20 BP; 5 A; 9 C; 3 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 424 ATGCGCACCATCCCCACG 443
DB 1 ATGCGCACCATCCCCCAAG 20
XX
RESULT 261
AA244825
ID AAZ44825 standard; DNA; 20 BP.
XX
XX AAZ44825;
XX
XX 19-APR-2000 (first entry)
XX
XX Human FADD primer ISIS #101862.
XX
XX FADD; human; antisense; inhibitor; Fas-associated death domain; primer;
XX probe; ss.
XX
```

```
OS Homo sapiens.
XX
XX US6015712-A.
XX
XX 18-JAN-2000.
XX
XX 19-JUL-1999; 99US-00357072.
XX
XX 19-JUL-1999; 99US-00357072.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Cowser LM, Baker BF, Zhang H;
XX
XX WPI; 2000-126316/11.
XX
XX Antisense oligonucleotides, useful for inhibiting human Fas-associated
XX death domain (FADD) expression are targeted to the 3' untranslated region
XX of the FADD gene.
XX
XX Claim 3; Col 69-70; 37pp; English.
XX
XX This invention describes novel antisense oligonucleotides (OGNs) (I) 8-20
XX nucleotides in length that specifically hybridize with and inhibit
XX nucleic acids encoding human Fas-associated death domain (FADD), targeted
XX to the 3' untranslated region (3'UTR). (I) can be used to treat animals,
XX especially humans, suspected of having or being prone to a disease or
XX condition associated with FADD expression. AAZ44746-244831 represent
XX primers and probes used in the method of the invention
XX
XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 46 GGACACGACGAGTGACTGCT 65
DB 1 GGAGTACAGTGCTGACTGCT 20
XX
RESULT 262
AAC68207
ID AAC68207 standard; DNA; 20 BP.
XX
XX AAC68207;
XX
XX 19-FEB-2001 (first entry)
XX
XX Gene typing PCR primer #2.
XX
XX Human leukocyte antigen; HLA; gene typing; infectious disease;
XX autoimmune disease; inflammation; cancer; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX CA2299675-A1.
XX
XX 12-SEP-2000.
XX
XX 10-MAR-2000; 2000CA-02299675.
XX
XX 12-MAR-1999; 99US-0124113P.
XX
XX (UYMA-) UNIV MANITOBA.
XX
XX Luo M, Brunham RC, Pan Y, Brunham K;
XX
XX WPI; 2000-679930/67.
XX
XX Typing polymorphic genes, useful to assess the association of alleles
XX with diseases and in disease diagnosis, uses a taxonomy based sequence
XX analysis in which a typing tree based on distinguishing sequences is
XX
```



PT constructed.

PS Disclosure; Page 64; 125pp; English.

XX The present invention provides a novel method for typing genes, particularly human leukocyte antigen (HLA) coding sequences. The method uses DNA sequences and a taxonomy-based sequence analysis method to assign alleles for HLA-DQA1, HLA-DQB1 and HLA-DRB. These alleles have been linked to diseases such as diabetes, IGA deficiency, multiple sclerosis, cancer, clinical and immunological manifestations of HIV infection, coeliac disease, idiopathic nephrotic syndrome, immune responses to parasite antigens, pemphigus vulgaris, inflammatory bowel disease, rheumatoid arthritis, allergy and other inflammatory diseases

XX Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1427 TCTCCGACAGGATGCGCATG 1446  
|||||  
Db 1 TCTCCGACAGGATTCCTTG 20

RESULT 263  
AAC79506/c  
ID AAC79506 standard; DNA; 20 BP.

XX AAC79506;

XX 07-FEB-2001 (first entry)

XX Human p38beta antisense oligonucleotide SEQ ID 29.

XX Antisense oligonucleotide; p38 mitogen activated protein kinase; MAPK; anti-rheumatic; antiarthritis; immunosuppressive; cardiant; heart disease; antiinflammatory; autoimmune disease; rheumatoid arthritis; apoptosis; phosphothioate; ss.

XX Homo sapiens.

XX WO200059919-A1.

XX 12-OCT-2000.

XX 04-APR-2000; 2000WO-US008794.

XX 06-APR-1999; 99US-00286904.

XX (ISIS-) ISIS PHARM INC.

XX Monia BP, Gaarde WA, Nero PS, McKay R, Popoff I;  
WPI; 2000-664982/64.

XX Antisense compound targeted to p38 mitogen activated protein kinase inhibits protein kinase and is useful for diagnosing and treating inflammatory, autoimmune and heart disease.

XX Example 3; Page 43; 90pp; English.

XX This invention relates to antisense compounds 8-30 nucleobases in length targeted to the 5'-untranslated region, translational start site, translational termination region or 3'-untranslated region of a nucleic acid encoding a p38 mitogen activated protein kinase (MAPK), where the antisense oligonucleotides inhibit the expression of MAPK. Sequences AAC79480 and AAC79501 represent human p38alpha MAPK and p38beta MAPK cDNA sequences. AAC79481 - AAC79500 and AAC79553 - AAC79521 represent human p38alpha antisense oligonucleotides, while AAC79502 - AAC79521 and AAC79571 - AAC79580 represent human p38beta antisense oligonucleotides. Also included in the invention are a p38alpha cDNA sequence AAC79523 and antisense oligonucleotides AAC79523 - AAC79536 isolated from rat tissue.

CC Murine p38beta MAPK cDNA is represented in AAC79537 and antisense oligonucleotides targeting the sequence are given in AAC79538 - AAC79552.

CC The antisense oligonucleotides have antirheumatic; antiarthritis; immunosuppressive; cardiant and antiinflammatory activity. The antisense oligonucleotides are useful for inhibiting the expression of p38 MAPK in cells or tissues. The oligonucleotides are used for treating an animal with diseases such as inflammatory or autoimmune diseases e.g. rheumatoid arthritis, or heart disease. The oligonucleotides are also useful for inhibiting inflammation or apoptosis

XX Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 764 TGCTCAGGACCTCAACAC 783  
|||||  
Db 20 TGCTCAGGACCTGAGCAC 1

RESULT 264  
ABZ80677/c  
ID ABZ80677 standard; DNA; 20 BP.

XX ABZ80677;

XX 13-JUN-2003 (first entry)

XX Beagle dog ob gene PCR amplification primer OBREV.

XX ss; dog; canine; obese gene; leptin; PCR; primer; amplification.

XX Canis familiaris.

XX JP2000279171-A.

XX 10-OCT-2000.

XX 30-MAR-1999; 99JP-00088295.

XX 30-MAR-1999; 99JP-00088295.

XX (NOMI ) MORINAGA & CO LTD.

XX WPI; 2001-027452/04.

XX A canine obese gene, its gene product, its preparation, its measuring reagent and measurement.

XX Example 1; Page 8; 18pp; Japanese.

XX The invention relates to the isolation of a canine Ob gene (obese gene) especially from beagle dogs. The gene is isolated from a dog DNA library using primers ABZ80676-ABZ80690. This sequence represents a PCR primer used to isolates the gene encoding the Ob protein. The invention also includes a vector comprising the DNA and a host cell transformed with the vector. The sequence is used for the large scale preparation of canine leptin

XX Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1075 TACTCCAATGAGGTGTGAC 1094  
|||||  
Db 20 TACTCCAATGAGGTGTGAC 1

RESULT 265  
AAC91033/c

```
ID XX AAC91033 standard; DNA; 20 BP.
AC XX AAC91033;
DT XX 15-MAR-2001 (first entry)
DE XX Primer MUC5B reverse.
XX XX
XX XX Immortal cell line; middle ear epithelial; hearing disorder;
XX XX otitis media; primer; ss.
XX XX
XX XX Unidentified.
XX XX
XX XX WO200073419-A1.
XX XX
XX XX 07-DEC-2000.
XX XX
XX XX 26-MAY-2000; 2000WO-US014751.
XX XX
XX XX 28-MAY-1999; 99US-0136736P.
XX XX (HOU-) HOUSE EAR INST.
XX XX
XX XX Lim DJ, Chun Y, Rhim JS;
XX XX
XX XX WPI; 2001-041148/05.
XX XX
XX XX New immortalized non-tumorigenic human middle ear epithelial cell line
XX XX useful for studying gene and protein expression in otitis media, and for
XX XX identifying chemical and biological agents for treating otitis media.
XX XX
XX XX Example 1; Page 30; 53pp; English.
XX XX
XX XX The present invention relates to a substantially pure cell line of
XX XX immortalized non-tumorigenic human middle ear epithelial cells, which
XX XX express an exogenous immortalizing gene. The cell line is useful for
XX XX studying the molecular mechanisms involved in the pathogenesis that
XX XX results in hearing disorders; e.g. hearing loss or otitis media. The cell
XX XX lines are also useful for studying the normal cell biology of human
XX XX middle ear epithelial cells. The cell lines can also be used as a
XX XX screening tool for identifying agents that may be useful in therapy
XX XX
XX XX Sequence 20 BP; 2 A; 5 C; 7 G; 6 T; 0 U; 0 Other;
XX XX
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1326 CAAGTACCGAGCGGAGGCC 1345
Db 20 CAAGTACTCAGCAGAGGCC 1
RESULT 266
AAF87532
ID AAF87532 standard; DNA; 20 BP.
XX XX
XX XX AAF87532;
XX XX
XX XX 10-JUL-2001 (first entry)
XX XX
XX XX Human-specific globin primer #3.
XX XX
XX XX Human; globin; neuroprotective; nootropic; antiparkinsonian;
XX XX antileipemic; antiarteriosclerotic; antidiabetic; dermatological;
XX XX antiinflammatory; antitumor; antitubercular; immunosuppressive; cell therapy;
XX XX non-haematopoietic lineage cell; vascular disorder; arteriosclerosis;
XX XX skin disorder; PCR primer; ss.
XX XX
XX XX Homo sapiens.
XX XX
XX XX WO200121766-A2.
XX XX
```

```
PD XX 29-MAR-2001.
XX XX
XX XX 22-SEP-2000; 2000WO-US026020.
XX XX
XX XX 23-SEP-1999; 99US-0156031P.
XX XX 10-JUL-2000; 2000US-0217439P.
XX XX
XX XX (CELL-) CELL SCI THERAPEUTICS.
XX XX
XX XX Pykett MJ, Rosenzweig M, Banu N;
XX XX
XX XX WPI; 2001-281603/29.
XX XX
XX XX Producing non-hematopoietic lineage cells from hematopoietic progenitor
XX XX cells for use in tissue repair, transplantation, involves culturing the
XX XX progenitor cells under environment that promotes cell differentiation.
XX XX
XX XX Example 2; Page 32; 42pp; English.
XX XX
XX XX The present sequence is a PCR primer which was used to amplify human
XX XX globin DNA in an example illustrating an invention relating to a method
XX XX for obtaining non-hematopoietic lineage cells from hematopoietic
XX XX progenitor cells (HPCs). The non-hematopoietic lineage cells are useful
XX XX in the therapeutic treatment of various pathological conditions such as
XX XX tissue repair, tissue transplantation and tissue reimplantation. They
XX XX are useful for treating neurodegenerative disorders such as Alzheimer's
XX XX disease, multiple sclerosis and Parkinson's disease, and vascular
XX XX disorders such as arteriosclerosis, coronary artery disease, aortic
XX XX aneurysm and arterial diseases of the lower extremities. The cells may be
XX XX used in the treatment of other diseases associated with early
XX XX arteriosclerosis including diabetes mellitus, hypertension, familial
XX XX hypercholesterolaemia and familial combined hyperlipidaemia. They may
XX XX also be used to treat disorders of the skin, such as eczema and
XX XX psoriasis. The present sequence was used in an assay to demonstrate in
XX XX vivo homing of human non-hematopoietic lineage cells to the brain of
XX XX transplanted mice. PCR specific for human globin was performed with brain
XX XX and muscle cells of the transplanted and nontransplanted mice. A PCR
XX XX product was detected only in the brain cells, indicating that the human
XX XX cells were only present in the brain
XX XX
XX XX Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
XX XX
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1627 GGCCCGAGGAGCGGCGCT 1646
Db 1 GTACCGAGGAGCGGCGCT 20
RESULT 267
AAF27086
ID AAF27086 standard; DNA; 20 BP.
XX XX
XX XX AAF27086;
XX XX
XX XX 06-APR-2001 (first entry)
XX XX
XX XX Human MEK1 phosphorothioate antisense oligonucleotide, SEQ ID NO:8.
XX XX
XX XX Human MEK1; mitogen-activated protein kinase kinase kinase 1;
XX XX MEK kinase 1; MAP/ERK kinase kinase 1; pro-apoptotic;
XX XX apoptosis signal regulation; programmed cell death;
XX XX serine/threonine kinase; MAP kinase cascade; JNK/SAPK;
XX XX Jun N-terminal kinase/stress-activated protein kinase; Bcl-2 substrate;
XX XX NF-kappa-B-mediated transcription regulation; expression inhibition;
XX XX antisense; hyperproliferative disorder; cancer; inflammation;
XX XX phosphorothioate; ss.
XX XX
XX XX Homo sapiens.
XX XX
XX XX US6168950-B1.
XX XX
```

```
XX PD 02-JAN-2001.
XX PF
XX PR 23-JUL-1999; 99US-00359756.
XX PR 23-JUL-1999; 99US-00359756.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Monia BP, Cowsett LM, Gaarde W, Ward DT;
XX PI WPI; 2001-122264/13.
XX DR
XX PT New antisense compound targeting nucleic acid encoding human mitogen-
XX PT activated protein kinase kinase 1 (MEKK1), useful for treating diseases
XX PT or conditions associated with MEKK1 expression, or preventing
XX PT inflammation or tumor formation.
XX PS
XX PS Claim 14; Col 39; 35pp; English.
XX CC Sequences AAF27086-AAF27125 represent phosphorothioate antisense
XX CC oligonucleotides targetted to the human MEKK1 gene, which inhibit its
XX CC expression. The antisense oligonucleotides were designed to target
XX CC different regions of the human MEKK1 RNA, and were analysed for their
XX CC effect on MEKK1 mRNA levels by quantitative real-time PCR. MEKK1 (also
XX CC known as mitogen-activated protein kinase kinase 1, MEK kinase 1
XX CC and MAP/ERK kinase kinase 1) is a dual-specific serine/threonine kinase
XX CC which mediates cellular responses to mitogenic stimuli, being involved in
XX CC JNK/SAPK (Jun N-terminal kinase/stress) activated protein kinase) MAP
XX CC kinase cascades. MEKK1 regulates signalling events associated with
XX CC apoptosis (programmed cell death) and NF-kappa-B, both of which have been
XX CC associated with the development of hyperproliferative disorders such as
XX CC cancer. Specifically, MEKK1 lies directly downstream of Bcl-2 in an
XX CC apoptotic signalling cascade, and plays a critical role in the control of
XX CC NF-kappa-B-mediated transcription at multiple points in the apoptotic
XX CC cascade. The oligonucleotides of the invention are useful for diagnosis,
XX CC prevention and treatment of conditions associated with MEKK1 expression,
XX CC such as inflammation, and cancer and other hyperproliferative disorders
XX SQ Sequence 20 BP; 0 A; 12 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 552 GCCCTCAGCGCGGCTCC 571
Db 1 GCTCTCGCGCGGCTGC 20

RESULT 268
AAD36658
XX AAD36658 standard; DNA; 20 BP.
XX AC
XX AC AAD36658;
XX XX
XX DT 09-AUG-2002 (first entry)
XX DE Human Her-1 antisense oligonucleotide ISIS #128532.
XX KW Human; epidermal growth factor receptor; hyperproliferative disease;
XX KW Her1; antisense; prophylaxis; psoriasis; phosphorothioate backbone;
XX KW tumour; cancer; ss.
XX XX
XX OS Homo sapiens.
XX OS Synthetic.
XX XX
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone"
XX FT modified_base 1..5
```

```
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 5
FT /*tag= d
FT /mod_base= m5c
FT modified_base 6
FT /*tag= e
FT /mod_base= m5c
FT modified_base 8
FT /*tag= f
FT /mod_base= m5c
FT modified_base 9
FT /*tag= g
FT /mod_base= m5c
FT modified_base 12
FT /*tag= h
FT /mod_base= m5c
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT WO200226759-A1.
XX 04-APR-2002.
XX 28-SEP-2001; 2001WO-US030551.
XX 29-SEP-2000; 2000US-00676610.
XX (ISIS-) ISIS PHARM INC.
XX Bennett CF, Wyatt JR, Freier SM;
XX WPI; 2002-394234/42.
XX Novel antisense oligonucleotide that specifically hybridizes with and
XX inhibits nucleic acid encoding epidermal growth factor receptor, useful
XX for treating hyperproliferative disease such as cancer or psoriasis.
XX Claim 1; Page 47; 169pp; English.
XX The invention relates to an antisense oligonucleotide targetted to a
XX nucleic acid molecule encoding human epidermal growth factor receptor
XX (Her1) to inhibit its expression. The antisense compounds are useful for
XX treating diseases or conditions associated with Her-1 such as
XX hyperproliferative diseases especially cancer (lung, ovarian, colon or
XX prostate cancer) and psoriasis. They are also useful as research
XX reagents, diagnostics, therapeutics, kits and prophylactically e.g. to
XX prevent or delay tumour formation. The present sequence is an antisense
XX oligonucleotide targetted to human Her-1
XX SQ Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 950 ACTGCCACCGCGCAGAGTGC 969
Db 1 AATGCCACCGCGCAGAGTGC 20

RESULT 269
AAL48714
XX AAL48714 standard; DNA; 20 BP.
XX AC
XX AC AAL48714;
XX XX
XX DT 15-OCT-2002 (first entry)
XX DE Chimeric beta-glucuronidase enzyme PCR primer SEQ ID NO: 40.
```

```
XX Plant; mismatch repair; chemical inhibitor; hypermutable; PCR; primer;
KW ss.
XX
XX Unidentified.
OS Unidentified.
OS Chimeric.
XX
XX WO200254856-A1.
XX
XX 18-JUL-2002.
XX
XX 15-JAN-2001; 2001WO-US000934.
XX
XX 15-JAN-2001; 2001WO-US000934.
XX
XX (MORP-) MORPHOTEK INC.
XX
XX Nicolaides NC, Grasso L, Sass PM;
XX WPI; 2002-599624/64.
XX
XX Making hypermutable cell for agricultural, pharmaceutical or
PT environmental applications, by exposing cell to mismatch repair inhibitor
PT such as anthracene, ATPase inhibitor, nuclease inhibitor or polymerase
PT inhibitor.
XX
XX Example 6; Page 111; 114pp; English.
XX
XX The present invention relates to a method of making a hypermutable cell,
CC involving exposing a cell to a chemical inhibitor of mismatch repair. The
CC method is useful for making a hypermutable cell, in particular a plant
CC cell, and for creating genetically altered host cells or organisms for
CC agricultural, chemical manufacturing, pharmaceutical and environmental
CC applications. The present sequence is a PCR primer used to sequence a
CC chimeric beta-glucuronidase reporter enzyme coding sequence for use in
CC the exemplification of the invention
XX
XX Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 1723 CATGTTCACTGCCACTTG 1742
Db 1 CATGTTCACTGCCACTCG 20
RESULT 270
AAD39520/c
XX AAD39520 standard; DNA; 20 BP.
XX
XX AAD39520;
XX
XX 04-OCT-2002 (first entry)
XX
XX Human calreticulin antisense oligonucleotide, ISIS 109113.
DE
XX Human; calreticulin; antisense compound; hyperproliferative disorder;
KW cancer; autoimmune disease; viral infection; cardiovascular disease;
KW antisense therapy; cytostatic; immunosuppressive; virucide; antisense;
KW phosphorothioate backbone; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
```

```
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 6..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 13
FT /tag= d
FT /mod_base= mSc
XX
XX WO200236743-A2.
XX
XX 10-MAY-2002.
XX
XX 30-OCT-2001; 2001WO-US049045.
XX
XX 30-OCT-2000; 2000US-00702327.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Cowse LM;
XX
XX WPI; 2002-479759/51.
XX
XX Novel antisense compound targeted to nucleic acid encoding calreticulin,
PT useful for treating a human having disease or condition associated with
PT calreticulin e.g. cancer, viral infection, autoimmune disease.
XX
XX Claim 3; Page 82; 109pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of calreticulin. The compositions comprise
CC antisense compounds, particularly antisense oligonucleotides, targeted
CC to nucleic acids encoding calreticulin. The antisense compound is useful
CC for inhibiting the expression of calreticulin in human cells or tissues.
CC It is also useful for treating a human having a disease or condition
CC associated with calreticulin, e.g., hyperproliferative disorder e.g.
CC cancer, autoimmune disease, viral infection or cardiovascular disease, by
CC inhibiting expression of calreticulin. It is useful for diagnostics,
CC therapeutics, prophylaxis and as research reagents and kits. It is also
CC used in antisense therapy. The present sequence is an antisense compound
CC targeted to human calreticulin. This sequence is used to study the
CC antisense inhibition of calreticulin expression-phosphorothioate 2'-MOE
CC gapmer oligonucleotides
XX
XX Sequence 20 BP; 7 A; 1 C; 7 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 4.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 540 CATCTTTGACAGCCCTCA 559
Db 20 CATCTTTGACAACTTCTCA 1
RESULT 271
ABK50599/c
XX
XX ID ABK50599 standard; DNA; 20 BP.
XX
XX ABK50599;
XX
XX 30-JUL-2002 (first entry)
XX
XX FAM modified probe #4.
XX
XX Method for screening genomic DNA; target sequence; transgenic screening;
KW organism identification; targeted mutagenesis screening method; mouse;
KW probe; ss.
XX
XX Mus sp.
XX
```



PT New antisense compounds targeted to nucleic acids encoding RecQ protein-  
 PT like 4, useful for modulating expression of the nucleic acid and treating  
 PT diseases associated with expression of the nucleic acid in humans.  
 XX  
 PS Claim 14; Col 46; 45pp; English.  
 XX  
 CC The invention relates to a compound targeted to specific nucleobases of  
 CC RecQ protein-like 4 (RECQL4) and which hybridizes and inhibits the  
 CC expression of RECQL4. The compound is useful for inhibiting the  
 CC expression of RECQL4 in cells or tissues and for treating an animal,  
 CC particularly a human suspected of having or being prone to a disease or  
 CC condition associated with expression of RECQL4. The compound is useful  
 CC for diagnostics, therapeutics and as a research reagent, e.g.  
 CC prophylactically to prevent or delay infection, inflammation or tumour  
 CC formation. This sequence represents an antisense oligonucleotide used in  
 CC inhibition of human RECQL4 expression  
 XX  
 SQ Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1160 GGGGTGGGCTGCATCTTC 1179  
 DB 20 GGGCTGGGCGCATCTTC 1  
 RESULT 274  
 ACC42440  
 ID ACC42440 standard; DNA; 20 BP.  
 XX  
 AC ACC42440;  
 XX  
 DT 26-AUG-2003 (first entry)  
 XX  
 DE Acyl CoA cholesterol acyltransferase-2 antisense oligo ISIS #143028.  
 XX  
 KW Acyl CoA cholesterol acyltransferase-2; antisense therapy; antilipemic;  
 KW antiarteriosclerotic; cardiovascular; ACAT-2; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; cardiovascular disease;  
 KW phosphorothioate; mouse; ss.  
 XX  
 OS Synthetic.  
 XX  
 Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /notes= Oligonucleotide has phosphorothioate backbone and  
 FT all cytidine nucleotides are 5-methylcytidine. Optionally  
 FT some nucleotides with 2'-methoxyethyl (2'-MOE wings)  
 FT modification"  
 XX  
 XX WO2003011889-A2.  
 XX  
 PD 13-FEB-2003.  
 XX  
 PF 15-JUL-2002; 2002WO-US022746.  
 XX  
 PR 30-JUL-2001; 2001US-00918026.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ, Lemonidis KM;  
 XX WPI; 2003-248145/24.  
 XX  
 CC New antisense oligonucleotides for modulating acyl CoA cholesterol  
 CC acyltransferase-2, e.g. for preventing or treating diseases associated  
 CC with abnormal lipid or cholesterol metabolism, atherosclerosis,  
 CC cardiovascular disease.  
 XX

PS Claim 3; Page 90; 112pp; English.  
 XX  
 CC The present invention relates to novel antisense oligonucleotides which  
 CC are targeted to human acyl CoA cholesterol acyltransferase-2 (ACAT-2)  
 CC nucleotide sequence (ACC42409-ACC42431), and mouse ACAT-2 (ACC42432-  
 CC ACC42457). The antisense oligonucleotides specifically hybridize with and  
 CC inhibit the expression of ACAT-2 nucleotide sequences (ACC42395 and  
 CC ACC42402). ACAT enzymes catalyze the synthesis of cholesterol esters from  
 CC free cholesterol and fatty acyl-CoA. The antisense oligonucleotides are  
 CC useful for treating an animal which has a disease or condition associated  
 CC with ACAT-2, e.g. a condition involving abnormal lipid metabolism, a  
 CC condition involving abnormal cholesterol metabolism, atherosclerosis, or  
 CC cardiovascular disease  
 XX  
 SQ Sequence 20 BP; 3 A; 10 C; 6 G; 1 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 938 GTGGCTGGGCTACTGCCAC 957  
 DB 1 GCGGCTGGGCCACAGCCAC 20  
 RESULT 275  
 ABX78105/c  
 ID ABX78105 standard; DNA; 20 BP.  
 XX  
 AC ABX78105;  
 XX  
 DT 16-APR-2003 (first entry)  
 XX  
 DE Human p38-beta MAPK oligonucleotide ISIS NO 17895.  
 XX  
 KW p38 mitogen-activated protein kinase; p38 MAPK; phosphorothioate;  
 KW antisense; antiarthritic; antiinflammatory; kinase inhibitor; human;  
 KW inflammatory disease; rheumatoid arthritis; gene therapy; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /notes= "phosphorothioate backbone, nucleotides 1-6 and 15  
 FT -20 are 2'-methoxyethoxy (MOE) nucleotides, nucleotides 7  
 FT -14 are 2'-deoxy- nucleotides, all C nucleotides are 5-  
 FT methyl cytosines"  
 XX  
 XX US6448079-B1.  
 XX  
 PD 10-SEP-2002.  
 XX  
 PF 15-AUG-2000; 2000US-00640101.  
 XX  
 PR 06-APR-1999; 99US-00286904.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Monia BP, Gaarde WA, Nero P, McKay R;  
 XX WPI; 2003-089122/08.  
 XX  
 CC New antisense compound, useful for preparing a composition for  
 CC diagnosing, treating or preventing inflammatory diseases, e.g. rheumatoid  
 CC arthritis.  
 XX  
 PS Example 3; Col 23-24; 44pp; English.  
 XX  
 CC This invention describes a novel antisense compound, which is 8-30  
 CC nucleobases in length targeted to a nucleic acid molecule encoding p38  
 CC mitogen-activated protein kinase (MAPK). The products of the invention  
 CC

CC have antiarthritic and antiinflammatory activity, can act as act as  
 CC kinase inhibitors. The antisense compound is useful for preparing a  
 CC composition for diagnosing, treating or preventing inflammatory diseases,  
 CC e.g. rheumatoid arthritis or for use in antisense gene therapy. This  
 CC sequence represents an antisense oligonucleotide used in a method to  
 CC inhibit p38 MAPK  
 XX  
 SQ Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 764 TGCTCAAGGACCTCAACAC 783  
 DB 20 TGCTCAAGCAGCTGAGCAC 1  
 RESULT 276  
 ID ABZ59542/c  
 ABZ59542 standard; DNA; 20 BP.  
 XX  
 AC ABZ59542;  
 XX  
 DT 17-APR-2003 (first entry)  
 XX  
 DE Mouse src-c chimeric phosphorothioate oligonucleotide SEQ ID NO:163.  
 XX  
 KW Mouse; src-c; tyrosine kinase; src-c inhibitor; cytostatic; osteopathic;  
 KW antiinflammatory; antibacterial; antisense therapy; vaccine; cancer;  
 KW antisense oligonucleotide; aberrant bone remodeling; breast cancer;  
 KW hyperproliferative disorder; pancreatic cancer; lung cancer; tumour;  
 KW ovarian cancer; oesophageal cancer; neuroblastoma; retinoblastoma;  
 KW Kaposi's sarcoma; infection; inflammation; tumour formation;  
 KW phosphorothioate; ss.  
 XX  
 OS Mus musculus.  
 OS Synthetic.  
 XX  
 XX Key Location/Qualifiers  
 FH modified\_base 1..20  
 FT /\*tag= b  
 FT /mod\_base= OTHER  
 FT /note= "phosphorothioate linkages"  
 FT modified\_base 1..5  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "2'-O-methoxyethyl gapmer (2'-MOE wing)"  
 FT modified\_base 16..20  
 FT /\*tag= c  
 FT /mod\_base= OTHER  
 FT /note= "2'-O-methoxyethyl gapmer (2'-MOE wing)"  
 FT  
 XX WO200295053-A2.  
 XX  
 XX 28-NOV-2002.  
 XX  
 XX 16-MAY-2002; 2002WO-US015684.  
 XX  
 XX 18-MAY-2001; 2001US-00860473.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Bennett FC, Watt AT;  
 XX  
 XX WPI; 2003-120806/11.  
 DR  
 XX New antisense oligonucleotides targeted to nucleic acids encoding src-c,  
 XX useful for diagnosing, treating or preventing diseases associated with  
 XX the expression of src-c, e.g. cancer or inflammation, and in research  
 XX applications.  
 XX  
 XX Claim 3; Page 93; 137pp; English.

XX  
 CC The present invention describes a compound (I) that is 8-50 nucleobases  
 CC in length targeted to a nucleic acid molecule encoding a 5'UTR, 3'UTR,  
 CC coding region, intron region, exon region, stop codon, intron:exon  
 CC junction, exon:exon junction, or 5' mRNA variant of src-c, and which  
 CC specifically hybridises with and inhibits the expression of src-c. (I)  
 CC have cytostatic, antiinflammatory, osteopathic and antibacterial  
 CC activities, and can be used in antisense therapy and in vaccines. The  
 CC antisense compounds (I) can be used for modulating the expression of src-  
 CC c and for treating diseases or conditions associated with expression of  
 CC src-c, e.g. aberrant bone remodeling or hyperproliferative disorders,  
 CC particularly cancer, such as breast cancer, pancreatic cancer, lung  
 CC cancer, ovarian cancer, oesophageal cancer, neuroblastoma, retinoblastoma  
 CC or Kaposi's sarcoma. (I) are also useful for diagnostics, therapeutics,  
 CC prophylaxis, e.g. to prevent or delay infection, inflammation or tumour  
 CC formation, as research reagents and kits, and in distinguishing between  
 CC functions of various members of a biological pathway. The present  
 CC sequence represents a mouse src-c antisense chimeric phosphorothioate  
 CC oligonucleotide, which is used in an example from the present invention  
 XX  
 SQ Sequence 20 BP; 6 A; 8 C; 5 G; 1 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1028 TGGCTGACTTTGGCGCTG3CC 1047  
 DB 20 TGGCGGACTTTGGGTG3CC 1  
 RESULT 277  
 AAD52909/c  
 ID AAD52909 standard; DNA; 20 BP.  
 XX  
 AC AAD52909;  
 XX  
 DT 14-MAY-2003 (first entry)  
 XX  
 DE Human TTYH2 intron C amplifying reverse PCR primer.  
 XX  
 KW Human; tweety homologue 2; TTYH2; therapy; cancer; tumour; cytostatic;  
 KW diagnostic marker; PCR; primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200292629-A1.  
 XX  
 XX 21-NOV-2002.  
 XX  
 XX 14-MAY-2002; 2002WO-AU000591.  
 XX  
 XX 14-MAY-2001; 2001AU-00004971.  
 XX  
 XX (UYQU-) UNIV QUEENSLAND TECHNOLOGY.  
 XX  
 XX Clements JA;  
 XX  
 XX WPI; 2003-129264/12.  
 DR  
 XX New human tweety homolog 2 polypeptides and polynucleotides, useful for  
 XX producing an antigen-binding molecule that is immuno-interactive with the  
 XX polypeptide or as diagnostic markers for cancers.  
 XX  
 XX Example 4; Page 92; 176pp; English.  
 XX  
 CC The invention relates to human tweety homologue 2 (TTYH2) polypeptide and  
 CC polynucleotide sequence. TTYH2 is useful for producing an antigen-binding  
 CC molecule that is immuno-interactive with the polypeptide. The agent is  
 CC useful for manufacturing a medicament for restoring a normal level and/or  
 CC functional activity of TTYH2 expression in a patient, and for treating or  
 CC preventing cancer or tumour. TTYH2 sequences may also be used to provide  
 CC both drug targets and regulators to promote or inhibit one or more

CC activities, and to provide diagnostic markers for cancers. The present  
CC sequence is a PCR primer used for amplifying human IYH2 gene intron  
XX  
SQ Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 858 GGACCTGAGCAGTACCTCG 877  
DB 20 GGACCTGAGCAGCAGCTGG 1  
RESULT 278  
ACF04494/C  
ID ACF04494 standard; DNA; 20 BP.  
XX  
AC ACF04494;  
XX  
DT 04-DEC-2003 (first entry)  
XX  
DE Real time PCR targeting IL-1ra PCR primer F43.  
XX  
XX Nucleic acid level determination; PCR; primer; probe; DNA quantification;  
KW gene therapy; immunosuppressive; anti-HIV; antiarthritic;  
KW neuroprotective; cytostatic; antiallergic; ss.  
XX  
OS Unidentified.  
XX  
PN WO2003060119-A2.  
XX  
PD 24-JUL-2003.  
XX  
PF 20-JAN-2003; 2003WO-EP000493.  
XX  
PR 18-JAN-2002; 2002EP-00447009.  
XX  
PA (ULBR ) UNIV LIBRE BRUXELLES.  
XX  
XX Stordeur P, Goldman M;  
XX WPI; 2003-598531/56.  
XX  
PT Quantifying in vivo RNA from a biological sample for producing a  
PT medicament for treating immune related disease by determining in vivo  
PT levels of transcripts using nucleic acid/reverse transcription-PCR  
PT reagent mix in an automated setup.  
XX  
XX Disclosure; Page 44; 83pp; English.  
XX  
CC The present invention relates to a method of quantifying in vivo RNA from  
CC a biological sample. This involves collecting the biological sample in a  
CC tube comprising a compound inhibiting RNA degradation and/or gene  
CC induction, forming a precipitate comprising nucleic acids, separating the  
CC precipitate from the supernatant, dissolving the precipitate using a  
CC buffer, forming a suspension, isolating nucleic acids from the suspension  
CC using an automated device, dispersing or distributing a reagent mix for  
CC reverse transcription (RT)-PCR using an automated device, dispersing or  
CC distributing the nucleic acids isolated within the dispersed reagent mix  
CC using an automated device and determining the in vivo levels of  
CC transcripts using the nucleic acid and RT-PCR reagent mix of the previous  
CC step in an automated setup. The method is useful for monitoring or  
CC detecting changes in in vivo nucleic acids levels in a biological agent  
CC present, such as eukaryotic or prokaryotic cells, viruses or phages in a  
CC biological sample or for producing a medicament for treating immune  
CC related disease, e.g., autoimmunity, rheumatoid arthritis, multiple  
CC sclerosis, cancer, immunodeficiencies such as AIDS, allergy, graft  
CC rejection or Graft versus Host Disease. The present sequence is a PCR  
CC primer/probe used in the exemplification of the invention  
XX  
SQ Sequence 20 BP; 1 A; 9 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 713 GACTGGAACATGAAGAGGG 732  
DB 20 GAATGGAACAGGAGAGGAG 1  
RESULT 279  
ADB79146/C  
ID ADB79146 standard; DNA; 20 BP.  
XX  
AC ADB79146;  
XX  
DT 04-DEC-2003 (first entry)  
XX  
DE Matrix metalloproteinase 1 antisense oligonucleotide, SEQ ID No 60.  
XX  
KW antisense; modulating; expression; matrix metalloproteinase 1; MMP1;  
KW hyperproliferative disorder; cancer; inflammatory disorder;  
KW atherosclerosis; MMP1 inhibitor; cytostatic; antiinflammatory;  
KW antiarteriosclerotic; ss; human.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FH modified\_base 1..20  
FH /tag= a  
FH /mod\_base  
FT /note= "OTHER= Nucleotides 1-5 and 15-20 are 2'-O-  
FT methoxyethyl's (2-MOE)'s separated by a gap region of 2'-  
FT deoxynucleotides. Nucleotides 1-20 have a  
FT phosphorothioate backbone. All cytidine residues are 5-  
FT methylcytidines"  
XX  
PN WO2003033659-A2.  
XX  
PD 24-APR-2003.  
XX  
PF 15-OCT-2002; 2002WO-US032940.  
XX  
PR 17-OCT-2001; 2001US-00035485.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Baker BF, Cowsett LM;  
XX WPI; 2003-393515/37.  
XX  
XX New compounds, particularly antisense oligonucleotides targeted to a  
XX nucleic acid encoding matrix metalloproteinase 1 (MMP1), useful for  
XX treating a disease/condition associated with MMP1, such as  
XX hyperproliferative disorder.  
XX  
PS Claim 3; Page 74; 99pp; English.  
XX  
CC The invention relates to antisense compounds, compositions and methods  
CC used for modulating the expression of matrix metalloproteinase 1 (MMP1).  
CC Specifically claimed, are antisense oligonucleotides capable of  
CC modulating the expression of MMP1, and which comprise any of the 55  
CC sequences of 20 bp, fully defined in the specification. The compound,  
CC composition and methods are useful for treating a disease or condition  
CC associated with MMP1, such as hyperproliferative disorder, e.g. cancer,  
CC inflammatory disorder or atherosclerosis, by inhibiting the expression of  
CC MMP1. They are also useful in research and diagnostics for modulating the  
CC expression of MMP1. The antisense compounds can act as MMP1 inhibitors  
CC and have the following activities: cytostatic, antiinflammatory, and  
CC antiarteriosclerotic. This polynucleotide sequence represents one of the  
CC antisense compounds used for modulating the expression of matrix  
CC metalloproteinase 1 of the invention.  
XX



SQ Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 4.7e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 962 AGAGGTGCTACCGAGAC 981  
|||||  
DB 20 AGATGTGCTACCGATAC 1

RESULT 280

ADD19339/c

ID ADD19339 standard; DNA; 20 BP.

XX AC ADD19339;

XX DT

15-JAN-2004 (first entry)

Leptin gene-specific PCR primer #2.

XX feline; cat; leptin; leptin inhibitor; obesity; PCR; ss; primer.

XX Unidentified.

XX JP2003038187-A.

XX 12-FEB-2003.

XX 31-JUL-2001; 2001JP-00230711.

XX 31-JUL-2001; 2001JP-00230711.

XX (MOMI ) MORINAGA & CO LTD.

XX WPI; 2003-527653/50.

XX Novel feline leptin polypeptide encoded by a feline ob gene which is

related to obesity in cats, useful for diagnosing and treating obesity.

XX Example; SEQ ID NO 6; 18pp; Japanese.

XX The invention comprises the amino acid and coding sequences of feline

leptin proteins. The DNA and protein sequences of the invention are

useful for screening for a compound which inhibits the activity of

leptin. The DNA and protein sequences of the are also useful for

diagnosing and treating obesity. The present DNA sequence represents a

PCR primer that was used in an example of the invention.

XX Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 4.7e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1075 TACTCCAGTGGTGGTCAC 1094

|||||

DB 20 TACTCCAGTGGTGGTC 1

RESULT 281

ADE71316/c

ID ADE71316 standard; DNA; 20 BP.

XX AC ADE71316;

XX 29-JAN-2004 (first entry)

XX PCR primer #2 used to illustrate microorganism breeding method.

XX Microorganism; PCR; primer; ss.

XX Synthetic.

XX JP2003047477-A.

XX 18-FEB-2003.

XX 07-AUG-2001; 2001JP-00239331.

XX 07-AUG-2001; 2001JP-00239331.

XX (MITU ) MITSUBISHI CHEM CORP.

XX WPI; 2003-508704/48.

XX Breeding microorganism cell whose host character is changed by expression

of introduced insertion sequence, by introducing the sequence into the

genome and is transformed using DNA which has the insertion sequence.

XX Example 3; SEQ ID NO 2; 20pp; Japanese.

XX The present invention relates to a method (M1) for breeding microorganism

cells whose host character is changed by the expression of the introduced

insertion sequence. The method involves introducing the insertion

sequence into the genome and is transformed using DNA which has the

insertion sequence. The present sequence is a PCR primer, which was used

in an example from the invention.

XX Sequence 20 BP; 4 A; 8 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 4.7e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1464 CAGTCTGGGGGAGCGGATCC 1483.

|||||

DB 20 CAGTCTGGGGGAGCGGATCC 1

RESULT 282

AAQ22395/c

ID AAQ22395 standard; DNA; 21 BP.

XX AC AAQ22395;

XX 09-JUL-1992 (first entry)

XX DNA for modulating effects of cytomegalovirus infection.

XX IE1; IE2; DNA polymerase; CMV; prophylactic; therapeutic;

antitense inhibition; gene expression; intron/exon boundary; ss.

XX Cytomegalovirus.

XX WO9203456-A.

XX 05-MAR-1992.

XX 14-AUG-1991; 91WO-U0005815.

XX 16-AUG-1990; 90US-00568366.

XX (ISIS-) ISIS PHARM INC.

XX Anderson KP, Draper KG;

XX WPI; 1992-096819/12.

XX Oligo-nucleotide(s) for modulating effects of cytomegalovirus infections

- which can be hybridised with portion of RNA or DNA derived from IE1,

IE2 or DNA genes of cytomegalovirus.

XX Disclosure; Table 2; 44pp; English.

XX The oligonucleotide was synthesised to be complementary to the IE2 NUC

CC SIG 2 of human cytomegalovirus. This site is known to control mRNA  
CC stability, processing and/or translational efficiency. The synthetic  
CC oligomer can hybridise to the native DNA polymerase of cytomegalovirus  
CC and modulate the activity of CMV. The oligomer can be used  
CC prophylactically or therapeutically to reduce the severity of disease  
CC caused by CMV. It specifically inhibits replication of CMV by antisense  
CC inhibition of gene expression. See also AAQ22353-400  
XX  
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAAGATCAACG 149  
||| ||||| |||||  
Db 21 CGCAAGAAGAAGACCAACG 2

## RESULT 283

AAQ22372  
ID AAQ22372 standard; DNA; 21 BP.

XX AC AAQ22372;

XX DT 09-JUL-1992 (first entry)

XX DE DNA for modulating effects of cytomegalovirus infection.

XX IE1; IE2; DNA polymerase; CMV; prophylactic; therapeutic;  
XX antisense inhibition; gene expression; intron/exon boundary; ss.

XX Cytomegalovirus.

XX WO9203456-A.

XX PD 05-MAR-1992.

XX PF 14-AUG-1991; 91WO-UO005815.

XX PR 16-AUG-1990; 90US-00568366.

XX (ISIS-) ISIS PHARM INC.

XX Anderson KP, Draper KG;

XX WPI; 1992-096819/12.

XX Oligo-nucleotide(s) for modulating effects of cytomegalovirus infections  
PT which can be hybridised with portion of RNA or DNA derived from IE1,  
PT IE2 or DNA genes of cytomegalovirus.

XX Claim 11; Page 36; 44pp; English.

XX The oligonucleotide was synthesised to be complementary to the IE2 NUC  
CC SIG-2 region of human cytomegalovirus. This site is known to control mRNA  
CC stability, processing and/or translational efficiency. The synthetic  
CC oligomer can hybridise to the native DNA polymerase of cytomegalovirus  
CC and modulate the activity of CMV. The oligomer can be used  
CC prophylactically or therapeutically to reduce the severity of disease  
CC caused by CMV. It specifically inhibits replication of CMV by antisense  
CC inhibition of gene expression. See also AAQ22353-400

SQ Sequence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAAGATCAACG 149  
||| ||||| |||||  
Db 1 CGCAAGAAGAAGACCAACG 20

## RESULT 284

AAT11965/c

ID AAT11965 standard; DNA; 21 BP.

XX AC AAT11965;

XX DT 25-MAR-2003 (revised)

XX DT 13-MAR-1996 (first entry)

XX Antisense oligonucleotide (ISIS 2922) complementary to human CMV.

XX antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;  
XX intermediate early complex; IE1; IE2; DNA polymerase gene; ss.

XX Synthetic.

XX Key Location/Qualifiers  
FT modified\_base 1..21  
FT /\*tag= a  
FT /note= "phosphorothioate backbone"

XX US5442049-A.

XX FN 15-AUG-1995.

XX PD 25-JAN-1993; 93US-00009263.

XX PF 19-NOV-1992; 92US-00927506.

XX PR (ISIS-) ISIS PHARM INC.

XX Baker B, Draper K, Anderson K;

XX WPI; 1995-292538/38.

XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to  
PT a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and  
PT treatment of CMV diseases.

XX Claim 1; Col 13-14; 66pp; English.

XX This is a claimed antisense oligonucleotide (ON) which when tested for  
CC activity against cytomegalovirus (CMV) showed greater than 90% inhibition  
CC of virus at a concentration of 5 microm. The target of this ON is  
CC nucleotides 170120-141 of the intermediate early 2 (IE2) nuclear  
CC localisation signal 2 of the human CMV genome. Antisense ONs targeting  
CC CMV DNA or RNA coding for the IE1, IE2 or DNA polymerase proteins have  
CC been shown to be effective in therapy, prophylaxis and diagnosis of CMV  
CC infection. The ONs may be modified to reduce nuclease resistance and to  
CC increase their efficacy. Modifications include phosphorothioate  
CC backbones, alkyl and halogen- substituted sugar moieties at the 2',  
CC position. (Updated on 25-MAR-2003 to correct PF field.)

XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAAGATCAACG 149  
||| ||||| |||||  
Db 21 CGCAAGAAGAAGACCAACG 2

## RESULT 285

AAT12031

ID AAT12031 standard; DNA; 21 BP.

XX AC AAT12031;

XX DT 25-MAR-2003 (revised)

XX DT 13-MAR-1996 (first entry)

XX CMV IE2 target gene sequence for antisense oligonucleotides.  
 DE antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;  
 KW intermediate early complex; IE1; IE2; DNA polymerase gene; ss.  
 XX Synthetic.  
 OS  
 XX US5442049-A.  
 FN  
 XX 15-AUG-1995.  
 PD  
 XX 25-JAN-1993; 93US-00009263.  
 PF  
 XX 19-NOV-1992; 92US-00927506.  
 PR  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Baker B, Draper K, Anderson K;  
 PI  
 XX WPI; 1995-292538/38.  
 DR  
 XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to  
 PT a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and  
 PT treatment of CMV diseases.  
 PT  
 PS Disclosure; Col 7-8; 66pp; English.  
 PS  
 XX AAT12008-31 are selected target sites of the cytomegalovirus (CMV) genome  
 CC suitable for targeting antisense oligonucleotides (ONS). This target  
 CC sequence covers part of the nuclear localisation signal 2 of intermediate  
 CC early (IE) complex 2 gene. Antisense ONS targeting CMV DNA or RNA coding  
 CC for the IE1, IE2 or DNA polymerase proteins have been shown to be  
 CC effective in therapy, prophylaxis and diagnosis of CMV infection. The ONS  
 CC may be modified to reduce nuclease resistance and to increase their  
 CC efficacy. Modifications include phosphorothioate backbones, alkyl and  
 CC halogen-substituted sugar moieties at the 2' position. (Updated on 23-MAR  
 CC -2003 to correct PF field.)  
 XX  
 SQ Sequence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 5e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 OY 130 CGGATGAGAGAGATCAACG 149  
 Db 1 CGCAGAGAGAGAGATCAACG 20  
 DE  
 RESULT 286  
 AAT01647/c  
 ID AAT01647 standard; DNA; 21 BP.  
 XX  
 AC AAT01647;  
 AC  
 DT 17-DEC-1995 (first entry)  
 DT  
 XX Peptide nucleic acid targeting CMV IE2 nuc sig 2.  
 DE  
 XX peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;  
 KW antiviral; diagnostic; ss.  
 KW  
 XX Synthetic.  
 OS  
 XX  
 FH Key Location/Qualifiers  
 FT misc\_feature 1..21  
 FT /tag= a  
 FT /note= "at least one (and preferably all) of the backbone  
 FT subunits are composed of amide units, so that the  
 FT oligomer consists of the nucleobases attached covalently  
 FT to a polyamide backbone"  
 FT  
 XX

PN WO9504748-A1.  
 XX  
 PD 16-FEB-1995.  
 XX  
 PF 09-AUG-1994; 94WO-US009039.  
 XX  
 PR 09-AUG-1993; 93US-00104438.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 XX Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowsert LM;  
 PI  
 XX WPI; 1995-090841/12.  
 DR  
 XX New peptide nucleic acid oligomers hybridisable to cytomegalovirus or  
 PT papillomavirus - are stable anti-sense molecules with high affinity for  
 PT single stranded DNA, used for treating infections.  
 PT  
 XX Claim 2; Page 43; 65pp; English.  
 PS  
 XX New oligomers are claimed which (A) have at least one peptide nucleic  
 CC acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5'  
 CC untranslated region, intron/exon (I/E) junction or coding sequence of  
 CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or  
 CC hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a  
 CC papillomavirus. The PNAs can be used to target RNA and single stranded  
 CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence  
 CC they may be used therapeutically for modulating cytomegalovirus and  
 CC papillomavirus processes and also as diagnostics (e.g., as probes for  
 CC specific mRNAs). PNA oligomers have high affinity for complementary  
 CC single stranded DNA. They are also able to form triple helices in which a  
 CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds  
 CC with the resulting double helix or with the first PNA strand. The PNAs  
 CC possess no significant charge and are water soluble, which facilitates  
 CC cellular uptake. Further, since they contain amides of non-biological  
 CC amino acids, they are biostable and resistant to enzymatic degradation by  
 CC proteases. The present sequence targets CMV IE2 nuclear localisation  
 CC signal 2  
 XX  
 SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 5e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 OY 130 CGGATGAGAGAGATCAACG 149  
 Db 21 CGCAGAGAGAGAGATCAACG 2  
 DE  
 RESULT 287  
 AAT01703  
 ID AAT01703 standard; DNA; 21 BP.  
 XX  
 AC AAT01703;  
 AC  
 DT 17-DEC-1995 (first entry)  
 DT  
 XX Peptide nucleic acid targeting CMV IE2 nuc sig 2.  
 DE  
 XX peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;  
 KW antiviral; diagnostic; ss.  
 KW  
 XX Synthetic.  
 OS  
 XX  
 FH Key Location/Qualifiers  
 FT misc\_feature 1..21  
 FT /tag= a  
 FT /note= "at least one (and preferably all) of the backbone  
 FT subunits are composed of amide units, so that the  
 FT oligomer consists of the nucleobases attached covalently  
 FT to a polyamide backbone"  
 FT  
 XX

```

FN WO9504748-A1.
XX
XX 16-FEB-1995.
XX
XX 09-AUG-1994; 94WO-US009039.
XX
XX 09-AUG-1993; 93US-00104438.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowsett LM;
XX
XX WPI; 1995-090841/12.
XX
XX New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
XX papilloma-virus - are stable anti-sense molecules with high affinity for
XX single stranded DNA, used for treating infections.
XX
XX Claim 2; Page 45; 65pp; English.
XX
XX New oligomers are claimed which (A) have at least one peptide nucleic
XX acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5',
XX untranslated region, intron/exon (I/E) junction or coding sequence of
XX cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or
XX hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a
XX papillomavirus. The PNAs can be used to target RNA and single stranded
XX DNA (ssDNA) to produce antisense-type gene regulation motifs. Hence
XX they may be used therapeutically for modulating cytomegalovirus and
XX papillomavirus processes and also as diagnostics (e.g., as probes for
XX specific mRNAs). PNA oligomers have high affinity for complementary
XX single stranded DNA. They are also able to form triple helices in which a
XX first PNA strand binds with RNA or ssDNA and a second PNA strand binds
XX with the resulting double helix or with the first PNA strand. The PNAs
XX possess no significant charge and are water soluble, which facilitates
XX cellular uptake. Further, since they contain amides of non-biological
XX amino acids, they are biostable and resistant to enzymatic degradation by
XX proteases. The present sequence targets CMV IE2 nuclear localisation
XX signal 2
XX
XX Sequence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 130 CGGATGAAGAAGATCAAAACG 149
Db 1 CGCAGAGAGAGACCAACG 20
||| ||||| |||||
1 CGCAGAGAGAGACCAACG 20

RESULT 288
AAT05682/c
ID AAT05682 standard; DNA; 21 BP.
XX
XX AC AAT05682;
XX
XX 06-JUN-1996 (first entry)
XX
XX Antisense oligonucleotide ISIS 2922 targetted to CMV IE2.
XX
XX Antisense oligonucleotide; ISIS 2922; cytomegalovirus; CMV;
XX immediate early 2 mRNA; IE2; human; HCMV; CMV retinitis; blindness; HIV;
XX ss.
XX
XX Synthetic.
XX
XX WO9528941-A1.
XX
XX 02-NOV-1995.
XX
XX 24-APR-1995; 95WO-US005007.
XX
XX 26-APR-1994; 94US-00233711.
XX

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XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Draper KG, Chapman SK, Kisner DL;
XX
XX WPI; 1995-382835/49.
XX
XX Anti-sense oligo-nucleotide against the CMV immediate early 2 gene -
XX useful for treatment of cytomegalovirus infections, esp. retinitis.
XX
XX Claim 1; Page 24; 32pp; English.
XX
XX This sequence represents an antisense oligonucleotide ISIS 2922 which is
XX targetted to the cytomegalovirus (CMV) immediate early 2 (IE2) mRNA. The
XX IE2 protein is capable of transcriptionally activating proteins of
XX cellular and viral origin and is thought to be one of the "master
XX switches" of human CMV (HCMV) gene expression. Therefore disruption of
XX the IE2 mRNA will lead to a reduction in HCMV infectivity. This
XX oligonucleotide may esp. be used in a human medicine to halt progression
XX of CMV retinitis which can cause blindness in immunocompromised, e.g.
XX HIV, patients. It has an additive effect with ganciclovir or foscarnet,
XX and is not adversely affected by AZT or ddC
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 130 CGGATGAAGAAGATCAAAACG 149
Db 21 CGCAGAGAGAGACCAACG 2
||| ||||| |||||
21 CGCAGAGAGAGACCAACG 2

RESULT 289
AAT07112/c
ID AAT07112 standard; cDNA; 21 BP.
XX
XX AC AAT07112;
XX
XX 25-JUN-1996 (first entry)
XX
XX IE2 translational start inhibitor IE (ISIS).
XX
XX Inhibitor; cytomegalovirus; human; antisense oligonucleotide; HCMV;
XX regulatory protein; general transcriptional activator; DNA replication;
XX orilyt-dependent viral replication; phosphorothioate linkage; CMV; IE2;
XX 2-O-methyl linkage; alkylphosphonate linkage; replication deficient;
XX immediate early; ss.
XX
XX Synthetic.
XX
XX WO9532213-A1.
XX
XX 30-NOV-1995.
XX
XX 19-MAY-1995; 95WO-US006160.
XX
XX 25-MAY-1994; 94US-00249386.
XX
XX (HYBR-) HYBRIDON INC.
XX
XX Pari GS;
XX
XX WPI; 1996-020525/02.
XX
XX Synthetic oligo:nucleotide(s) that hybridise to cytomegalovirus (CMV) DNA
XX - inhibit CMV gene expression, useful for treating or preventing human
XX CMV infection.
XX
XX Disclosure; Page 23; 64pp; English.
XX
XX AAT07089-T07112 represent antisense oligonucleotides directed against
XX

```

CC regions of the human cytomegalovirus (HCMV) genome. This sequence targets  
CC the immediate early 2 (IE2) translational start site. All of the targeted  
CC genes are required for orylyt-dependent viral replication. These  
CC sequences therefore inhibit HCMV DNA replication by hybridising to these  
CC genes under normal physiological conditions. Preferably, these sequences  
CC are modified to contain at least 1 internucleotide linkage selected from  
CC phosphorothioate, 2'-O-methyl and alkylphosphonate linkages. As these  
CC sequences inhibit HCMV replication, they can be used in compositions to  
CC treat or prevent HCMV infection in a cell. The replication deficient CMV  
CC strains that can be produced using these sequences will be useful for the  
CC study of CMV in the absence of mutant strains  
XX

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02; Indels 0; Gaps 0;  
Matches 17; Conservative 0; Mismatches 3;

QY 130 CGGATGAAGAAGATCAACG 149

Db 21 CGCAAGAGAGAGCAACG 2

RESULT 290

AA36470/C  
ID AAX36470 standard; DNA; 21 BP.

AC AAX36470;

DT 06-JUL-1999 (first entry)

DE Chimeric 2'-O-methyl oligo for CMV replication inhibition.

XX RNaseH; RNA cleavage; DNA cleavage; hybridisation; protein kinase C gene;  
XX gene expression modulation; ras; raf; therapy; AIDS; atherosclerosis;  
XX infection; cell growth; ss.

OS Synthetic.

XX WO9730067-A1.

PN 21-AUG-1997.

PF 07-FEB-1997; 97WO-US002043.

PR 14-FEB-1996; 96US-0011620P.

PA (ISIS-) ISIS PHARM INC.

PA (NOVS ) NOVARTIS AG.

PI Cook PD, Monia B, Altmann K, Martin P;

XX WPI; 1997-424968/39.

XX Oligo:nucleotide with RNaseH activity, which specifically hybridises to  
XX DNA or RNA - comprises 1st and 2nd sub:sequence(s) having 2'-O-CH2-CH2-O-  
XX CH3 and 2'-deoxy sugar moieties, useful for therapy or diagnosis.  
XX Example 22; Page 47; 86pp; English.

XX This sequence is an example of an oligonucleotide of the invention, and  
XX is an inhibitor of CMV replication. The invention relates to  
XX oligonucleotides (A), which specifically hybridises to RNA or DNA,  
XX comprises a linear sequence of nucleotide units linked by phosphodiester  
XX or phosphorothioate linkages, comprising a first subsequence having 2'-O-  
XX CH2-CH2-O-CH3 sugar moieties and a second subsequence having 2'-deoxy  
XX sugar moieties. (A), which has RNaseH activity for cleaving a  
XX complementary strand, can be used to modulate the expression of ras, raf  
XX and protein kinase C genes, useful in the therapy of AIDS,  
XX atherosclerosis, bacterial or other infections, or to control aberrant  
XX cell growth in humans, animals or plants. (A) can also be used  
XX diagnostically, particularly when labelled, to detect overexpression of  
XX mRNA or expression of abnormal RNA, including imaging of tissue sections,

CC and as a research reagent. (A) has increased binding affinity for  
CC complementary strands (attributable to the 2'-O-CH2-CH2-O-CH3 sugar  
CC moiety), which overcomes the loss of affinity caused by altered intersugar  
CC links), and increased resistance to nuclease (from the modified links and  
XX the 2'-O-CH2-CH2-O-CH3 sugar moiety)

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02; Indels 0; Gaps 0;  
Matches 17; Conservative 0; Mismatches 3;

QY 130 CGGATGAAGAAGATCAACG 149

Db 21 CGCAAGAGAGAGCAACG 2

RESULT 291

AA36471/C  
ID AAX36471 standard; DNA; 21 BP.

AC AAX36471;

DT 06-JUL-1999 (first entry)

DE Chimeric 2'-O-methyl oligo for CMV replication inhibition.

XX RNaseH; RNA cleavage; DNA cleavage; hybridisation; protein kinase C gene;  
XX gene expression modulation; ras; raf; therapy; AIDS; atherosclerosis;  
XX infection; cell growth; ss.

OS Synthetic.

XX WO9730067-A1.

PN 21-AUG-1997.

PF 07-FEB-1997; 97WO-US002043.

PR 14-FEB-1996; 96US-0011620P.

PA (ISIS-) ISIS PHARM INC.

PA (NOVS ) NOVARTIS AG.

PI Cook PD, Monia B, Altmann K, Martin P;

XX WPI; 1997-424968/39.

XX Oligo:nucleotide with RNaseH activity, which specifically hybridises to  
XX DNA or RNA - comprises 1st and 2nd sub:sequence(s) having 2'-O-CH2-CH2-O-  
XX CH3 and 2'-deoxy sugar moieties, useful for therapy or diagnosis.  
XX Example 22; Page 47; 86pp; English.

XX This sequence is an example of an oligonucleotide of the invention, and  
XX is an inhibitor of CMV replication. The invention relates to  
XX oligonucleotides (A), which specifically hybridises to RNA or DNA,  
XX comprises a linear sequence of nucleotide units linked by phosphodiester  
XX or phosphorothioate linkages, comprising a first subsequence having 2'-O-  
XX CH2-CH2-O-CH3 sugar moieties and a second subsequence having 2'-deoxy  
XX sugar moieties. (A), which has RNaseH activity for cleaving a  
XX complementary strand, can be used to modulate the expression of ras, raf  
XX and protein kinase C genes, useful in the therapy of AIDS,  
XX atherosclerosis, bacterial or other infections, or to control aberrant  
XX cell growth in humans, animals or plants. (A) can also be used  
XX diagnostically, particularly when labelled, to detect overexpression of  
XX mRNA or expression of abnormal RNA, including imaging of tissue sections,  
XX and as a research reagent. (A) has increased binding affinity for  
XX complementary strands (attributable to the 2'-O-CH2-CH2-O-CH3 sugar  
XX moiety), which overcomes the loss of affinity caused by altered intersugar  
XX links), and increased resistance to nuclease (from the modified links and  
XX the 2'-O-CH2-CH2-O-CH3 sugar moiety)

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;  
 Query Match 0.9%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 5e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAAAACG 149  
 DB 21 CGCAAGAGAGAGCAAAACG 2

RESULT 292  
 AAT49210/c  
 ID AAT49210 standard; DNA; 21 BP.  
 AC AAT49210;  
 XX  
 DT 02-JUL-2002 (revised)  
 DT 03-SEP-1997 (first entry)  
 XX  
 XX Phosphorothioate oligonucleotide ISIS-2922.  
 XX  
 XX phosphorothioate; therapeutic; RNase H activity; ras; antisense;  
 KW inhibit translation; treating; hepatitis; inflammatory disease;  
 KW intercellular cell adhesion factor; ICAM-1; cytomegalovirus retinitis;  
 KW cancer; protein kinase C alpha; c-raf; Ha-ras; Ki-ras; AIDS; chiral;  
 KW thermodynamic stability; hepatitis C virus; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX Key Location/Qualifiers  
 FH modified\_base 1..21  
 FT /\*tag= a  
 FT /note= "phosphorothioate 3' to 5' linkages"  
 FT  
 FN MO9639154-A1.  
 XX  
 XX 12-DEC-1996.  
 PD  
 XX  
 XX 05-JUN-1996; 96WO-US008757.  
 XX  
 XX 06-JUN-1995; 95US-00466692.  
 PR 06-JUN-1995; 95US-00467597.  
 PR 06-JUN-1995; 95US-00468447.  
 PR 06-JUN-1995; 95US-00468569.  
 PR 06-JUN-1995; 95US-00468851.  
 PR 06-JUN-1995; 95US-00470129.  
 PR 06-JUN-1995; 95US-00471966.  
 PR 06-JUN-1995; 95US-00471967.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 XX Cook PD, Hoke G;  
 XX  
 XX WPI; 1997-042838/04.  
 XX  
 XX Sequence-specific oligo:nucleotide(s) useful in anti-sense therapy -  
 PT contain phosphorothioate linkages of high chiral purity, also used to  
 PT induce RNase H activity.  
 XX  
 XX Claim 1; Page 22; 49pp; English.  
 XX  
 XX AAT49204-14 are oligonucleotides where at least 75 % of the nucleoside  
 CC units are joined together by Sp or Rp phosphorothioate 3' to 5' linkages.  
 CC The oligonucleotides are useful therapeutically, e.g. by eliciting RNase  
 CC H activity ras antisense molecules to inhibit translation. Uses of the  
 CC oligos include treating hepatitis, inflammatory diseases mediated by  
 CC intercellular cell adhesion factor ICAM-1 and cytomegalovirus retinitis,  
 CC as well as treatment of cancers mediated by protein kinase C alpha, c-raf  
 CC kinase, Ha-ras or Ki-ras and treating AIDS. The sequence-specific  
 CC phosphorothioate oligonucleotides have substantially chirally pure  
 CC intersugar linkages which increase the thermodynamic stability of  
 CC heteroduplexes with target RNA and DNA. The present sequence is used in

CC the treatment of cytomegalovirus retinitis. (Updated on 02-JUL-2002 to  
 CC add missing PA field.)  
 XX  
 SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 5e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAAAACG 149  
 DB 21 CGCAAGAGAGAGCAAAACG 2

RESULT 293  
 AAT90843/c  
 ID AAT90843 standard; DNA; 21 BP.  
 XX  
 AC AAT90843;  
 XX  
 DT 14-APR-1998 (first entry)  
 XX  
 XX Anti-cytomegalovirus activity oligonucleotide ISIS 2922.  
 DE Human; cytomegalovirus; infection; antiviral; CMV; diagnosis;  
 KW chemical modification; phosphorothioate; ss.  
 KW  
 OS Synthetic.  
 XX  
 XX Key Location/Qualifiers  
 FH modified\_base 1..21  
 FT /\*tag= a  
 FT /note= "Phosphorothioate linkages"  
 FT  
 FN MO9733992-A1.  
 XX  
 XX 18-SEP-1997.  
 PD  
 XX  
 XX 14-MAR-1997; 97WO-US004235.  
 XX  
 XX 14-MAR-1996; 96US-00615801.  
 XX (HYBR-) HYBRIDON INC.  
 XX  
 XX Pari GS;  
 XX  
 XX WPI; 1997-479898/44.  
 XX  
 XX Modified oligo:nucleotide(s) with antiviral activity - used to treat or  
 PT prevent human cytomegalovirus infections.  
 XX  
 XX Disclosure; Page 7; 31pp; English.  
 XX  
 XX The present sequence represents a chemically modified oligonucleotide  
 CC with antiviral activity against human cytomegalovirus (CMV). The  
 CC chemically modified oligonucleotide is targeted to the UL36/37 gene of  
 CC CMV, and is used to treat or prevent human CMV infections. Also, the  
 CC chemically modified oligonucleotide can be used as a diagnostic probe to  
 CC detect CMV in clinical and experimental samples. Compared with known anti  
 CC -CMV antisense molecules the chemically modified oligonucleotide is more  
 CC active, and more stable in vivo (allowing reduction in dose or less  
 CC frequent administration). It has better bioavailability to target organs  
 CC and tissues, and is less toxic (in trials, humans tolerated 2 hour  
 CC infusion of 0.5 mg/kg without toxicity)  
 XX  
 SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 5e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAAAACG 149  
 DB 21 CGCAAGAGAGAGCAAAACG 2

Db 21 CGCAAGAGAGAGCAACG 2

RESULT 294

AAV70321/C

ID AAV70321 standard; DNA; 21 BP.

XX AC AAV70321;

XX DT 05-FEB-1999 (first entry)

XX DE CMV gene oligomeric molecule probe #1.

XX KW CMV; human; cytomegalovirus; restenosis; angioplasty; atherectomy;

XX KW hybridisation; probe; oligomeric molecule; morpholino; HMCV;

XX KW phosphoramidate; ss.

XX OS Synthetic.

XX OS Human herpesvirus 5.

XX FH Key

XX FT modified\_base 1..21

XX FT /tag= a

XX FT /note= "preferably phosphoramidate linkages"

XX PN WO9846740-A1.

XX PD 22-OCT-1998.

XX PF 16-APR-1998; 98WO-US007866.

XX PR 17-APR-1997; 97US-0043274P.

XX PA (ANTI-) ANTIVIRALS INC.

XX PI Burger DR;

XX DR WPI; 1998-594572/50.

XX PT Inhibiting restenosis using oligonucleotide binding to cytomegalovirus

XX PT nucleic acid - useful for, e.g. preventing cytomegalovirus replication,

XX PT particularly after angioplasty or atherectomy.

XX PS Claim 8; Page 15; 24pp; English.

XX CC The present invention describes a method for inhibiting restenosis, in a

XX CC subject infected with cytomegalovirus (CMV) who has undergone, or is

XX CC undergoing, angioplasty or atherectomy. The method comprises

XX CC administering an oligonucleotide that hybridises to at least part of a

XX CC target sequence in a CMV gene. The oligonucleotide comprises purine and

XX CC pyrimidine bases that hybridise to corresponding bases in the target,

XX CC connected by 5-7 atom cyclic backbone groups. The oligonucleotides are

XX CC used to inhibit CMV replication, which is implicated in proliferation of

XX CC smooth muscle cells. They are particularly administered at the site of

XX CC injury but oral and parental administration are also contemplated.

XX CC Typically the dose is 1-25 (preferably 2-15) micro mole, or when included

XX CC in a delivery device, 30-3000 (preferably 300-1500) micro g/cm2 of

XX CC surface area being treated. Compared with sugar-based oligonucleotides,

XX CC the oligonucleotides of the present invention have higher affinity for

XX CC target RNA and better resistance to nucleases. Also the target-

XX CC oligonucleotide duplex formed is not unwound in the cell and since the

XX CC oligonucleotides are uncharged they enter cells more easily. Delivering

XX CC the oligonucleotides from balloon catheters or stents provides a high

XX CC concentration at the target site. AAV70321 to AAV70332 represent

XX CC specifically claimed examples of the oligonucleotides from the present

XX CC invention

XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

XX Query Match 0.9%; Score 15.2; DB 1; Length 21;

XX Best Local Similarity 85.0%; Pred. No. 5e+02;

XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

XX QY 130 CGCATGAGAGAGATCAACG 149

XX DB 21 CGCAAGAGAGAGCAACG 2

Db 21 CGCAAGAGAGAGCAACG 2

RESULT 294

AAV70321/C

ID AAV70321 standard; DNA; 21 BP.

XX AC AAV70321;

XX DT 05-FEB-1999 (first entry)

XX DE CMV gene oligomeric molecule probe #1.

XX KW CMV; human; cytomegalovirus; restenosis; angioplasty; atherectomy;

XX KW hybridisation; probe; oligomeric molecule; morpholino; HMCV;

XX KW phosphoramidate; ss.

XX OS Synthetic.

XX OS Human herpesvirus 5.

XX FH Key

XX FT modified\_base 1..21

XX FT /tag= a

XX FT /note= "preferably phosphoramidate linkages"

XX PN WO9846740-A1.

XX PD 22-OCT-1998.

XX PF 16-APR-1998; 98WO-US007866.

XX PR 17-APR-1997; 97US-0043274P.

XX PA (ANTI-) ANTIVIRALS INC.

XX PI Burger DR;

XX DR WPI; 1998-594572/50.

XX PT Inhibiting restenosis using oligonucleotide binding to cytomegalovirus

XX PT nucleic acid - useful for, e.g. preventing cytomegalovirus replication,

XX PT particularly after angioplasty or atherectomy.

XX PS Claim 8; Page 15; 24pp; English.

XX CC The present invention describes a method for inhibiting restenosis, in a

XX CC subject infected with cytomegalovirus (CMV) who has undergone, or is

XX CC undergoing, angioplasty or atherectomy. The method comprises

XX CC administering an oligonucleotide that hybridises to at least part of a

XX CC target sequence in a CMV gene. The oligonucleotide comprises purine and

XX CC pyrimidine bases that hybridise to corresponding bases in the target,

XX CC connected by 5-7 atom cyclic backbone groups. The oligonucleotides are

XX CC used to inhibit CMV replication, which is implicated in proliferation of

XX CC smooth muscle cells. They are particularly administered at the site of

XX CC injury but oral and parental administration are also contemplated.

XX CC Typically the dose is 1-25 (preferably 2-15) micro mole, or when included

XX CC in a delivery device, 30-3000 (preferably 300-1500) micro g/cm2 of

XX CC surface area being treated. Compared with sugar-based oligonucleotides,

XX CC the oligonucleotides of the present invention have higher affinity for

XX CC target RNA and better resistance to nucleases. Also the target-

XX CC oligonucleotide duplex formed is not unwound in the cell and since the

XX CC oligonucleotides are uncharged they enter cells more easily. Delivering

XX CC the oligonucleotides from balloon catheters or stents provides a high

XX CC concentration at the target site. AAV70321 to AAV70332 represent

XX CC specifically claimed examples of the oligonucleotides from the present

XX CC invention

XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

XX Query Match 0.9%; Score 15.2; DB 1; Length 21;

XX Best Local Similarity 85.0%; Pred. No. 5e+02;

XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

XX QY 130 CGCATGAGAGAGATCAACG 149

XX DB 21 CGCAAGAGAGAGCAACG 2





DR WPI; 1998-251302/22.  
XX Screening for agents that effect cell cycle regulatory proteins - using a  
PT cell line that expresses a reporter gene in response to regulation  
PT through phosphorylation by a cyclin/CDK system.  
XX  
XX Example 4; Page 68; 93pp; English.  
XX Primers AAV60724-V60725 were used to PCR amplify codons 1-151 of the  
CC human cyclin-dependent kinase 2 (hCDK2). The amplified product was used  
CC to generate a fusion protein comprising part of the hCDK2 sequence linked  
CC to codons 153-302 of the yeast PHO85 gene. The fusion protein is used to  
CC screen for compounds that affect mammalian cell cycle regulatory  
CC proteins. The method comprises administering a compound to a cell line,  
CC which contains a reporter gene linked to an Upstream Activation Sequence  
CC (UAS) and a promoter, where the UAS binds a transcription control factor  
CC (TCF) which is regulated through cyclin/cyclin-dependent kinase (CDK)  
CC phosphorylation. Also included in the construct is an effector gene  
CC providing a gene product to permit normal cyclin/CDK regulation of the  
CC TCF. Expression of the reporter gene is then analysed in the cell line,  
CC thereby determining whether the compound affects the normal regulation.  
CC The method can be used to identify inhibitors and activators of mammalian  
CC cell cycle regulatory proteins, especially inhibitors and activators of  
CC cyclins, CDKs, cyclin/CDK complexes, cyclin kinase inhibitors (CKIs), and  
CC cyclin/CDK/CKI complexes. The identified agents can be used for  
CC stimulating growth of cells (as in wound healing), or regulating  
CC excessive cell growth and division (as in cancer therapy)  
XX  
SQ Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1033 GACTTTGGCGCTGGCCGAGC 1052  
Db 21 GACTTTGGCGCTGGCCGAGC 2  
RESULT 299  
AAV40585/C  
ID AAV40585 standard; DNA; 21 BP.  
XX AAV40585;  
AC AAV40585;  
DT 21-DEC-1998 (first entry)  
XX Human TSC gene exon 10 forward primer hTSCex10.  
DE Thiadiazide-sensitive Na-Cl cotransporter; TSC; hTSC gene; human;  
XX ion transport; Gitelman's syndrome; Bartter's syndrome;  
KW hypokalaemic alkalosis; hypocalciuria; hypomagnesemia; diagnosis;  
KW therapy; SSCP; primer; ss.  
XX  
XX Synthetic.  
OS Homo sapiens.  
XX  
XX WO9829431-A1.  
PN 09-JUL-1998.  
XX  
XX 19-DEC-1997; 97WO-US023553.  
PF  
XX 31-DEC-1996; 96US-00778052.  
PR (UYVA ) UNIV YALE.  
XX Lifton RP, Simon DB;  
PI  
XX WPI; 1998-388029/33.  
DR  
XX Thiadiazide sensitive cotransporter and ATP sensitive potassium channel  
PT genes - useful for developing products for the diagnosis and treatment of

PT ion transport disorders, e.g. Gitelman's Syndrome or Bartter's Syndrome.  
XX Example 1; Page 51; 105pp; English.  
XX Primers hTSCex10 forward and reverse (see AAV40585 and AAV40586,  
CC respectively) are designed to amplify exon 10 of the human hTSC gene (see  
CC AAV40561) that codes for thiazide-sensitive Na-Cl cotransporter TSC (see  
CC AAW29682). Both primers are located within introns of hTSC. 27 Sets of  
CC specific primers (see AAV40565-V40618) were used for SSCP analysis of  
CC hTSC. Amplified products were analysed for molecular variants by  
CC electrophoresis, and identified variants were sequenced. Complete linkage  
CC of Gitelman's syndrome with TSC was demonstrated. Identification of the  
CC molecular basis of Gitelman's syndrome allows for the genetic diagnosis  
CC of this disorder. The invention provides products and methods useful for  
CC diagnosis and treatment of Gitelman's syndrome and other ion transport  
CC disorders  
XX SQ Sequence 21 BP; 9 A; 1 C; 10 G; 1 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1689 CTTCCCTGCTTACTCTCTGC 1708  
Db 21 CTTCCCTGCTTACTCTCTGC 2  
RESULT 300  
AAV17948  
ID AAV17948 standard; DNA; 21 BP.  
XX AAV17948;  
AC AAV17948;  
DT 11-MAY-1999 (first entry)  
XX CMV target sequence in immediate early gene region.  
DE Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;  
KW cytomegalovirus; inhibition; replication; sugar modification;  
KW phosphorothioate; infection; retinitis; ss.  
XX Human herpesvirus 5.  
OS  
XX WO9845314-A1.  
PN 15-OCT-1998.  
XX 07-APR-1998; 98WO-US006895.  
PF 09-APR-1997; 97US-00838715.  
XX (ISIS-) ISIS PHARM INC.  
XX Draper KG, Kisner DL, Anderson KP, Chapman S;  
PI WPI; 1998-568330/48.  
XX New antisense oligonucleotides that target cytomegalovirus nucleic acid -  
PT particularly including 2-methoxyethoxy sugar modifications, especially  
PT for treating viral retinitis, with long-lasting retention in the retina.  
XX Disclosure; Page 23; 99pp; English.  
XX Antisense oligonucleotides (AAV17861-X17924) are targeted to a nucleic  
CC acid (AAV17925-X17948) encoding IE (immediate early) 1 or 2, or DNA  
CC polymerase of cytomegalovirus (CMV) and are able to inhibit CMV  
CC replication. The sequence shown here represents the target site in the  
CC IE2 gene region and corresponds to the nuclear localisation signal 2  
CC sequence. Optionally the oligonucleotides include at least one 2'-(2-  
CC methoxyethoxy) sugar modification or phosphorothioate internucleotide  
CC linkages. The oligonucleotides are used to inhibit CMV infections (by in  
CC vivo or in vitro contact with cells, tissues or body fluids), especially

CC to treat or prevent CMV infections, particularly retinitis  
 XX  
 SQ Sequence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 5e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 130 CGGATGAAGAGATCAACG 149  
 ||| ||||| ||||| |||||  
 Db 1 CGCAAGAGAGAGCAACG 20

RESULT 301  
 AAX15075/c  
 ID AAX15075 standard; DNA; 21 BP.  
 XX  
 AC AAX15075;  
 XX  
 DT 20-MAR-2003 (revised)  
 DT 16-APR-1999 (first entry)  
 XX  
 XX CMV antisense chimeric oligonucleotide of the invention.  
 DE  
 XX Nuclease resistant; ribofuranosyl moiety; 2'-aminoalkoxy; tumour;  
 KW 2'-imidazolylalkoxy; modulation; activity; AIDS; atherosclerosis;  
 KW phosphorothioate; DNA-RNA hybrid; ss.  
 KW  
 XX Synthetic.

| Key           | Location/Qualifiers        |
|---------------|----------------------------|
| modified_base | 1..20                      |
|               | /*tag= a                   |
|               | /note= "phosphorothioated" |
| misc_RNA      | 4..5                       |
|               | /*tag= b                   |
| misc_RNA      | 17..18                     |
|               | /*tag= c                   |

US5872232-A.  
 16-FEB-1999.  
 06-JUN-1995; 95US-00471973.  
 11-JAN-1990; 90US-00463358.  
 13-AUG-1990; 90US-00566977.  
 12-AUG-1991; 91WO-US005720.  
 05-MAR-1992; 92US-00835932.  
 01-JUL-1992; 92US-00854634.  
 (ISIS-) ISIS PHARM INC.  
 Cook PD, Kawasaki AM;  
 WPI; 1999-166721/14.  
 New 2'-O-modified oligo-nucleotide(s) - comprising nucleotide(s) comprising a 2'-aminoalkoxy or 2'-imidazolylalkoxy substituent, used for hybridisation to RNA or DNA.  
 Example 34; Col 53; 48pp; English.

The present oligonucleotide exemplifies the oligonucleotides of the invention. Oligonucleotides of the invention are nuclease resistant, and comprise covalently-bound nucleosides that individually include a ribose or deoxyribose sugar portion and base portion where the nucleosides are joined together by internucleoside linkages such that the base portion of the nucleosides form a mixed base sequence that is complementary to a RNA base sequence or to a DNA base sequence. At least one of the nucleosides has a modified ribofuranosyl moiety bearing a 2'-aminoalkoxy or 2'-imidazolylalkoxy substituent. The nuclease resistant compounds can be used for modulating the activity of DNA or RNA. They can be used for

CC treating organisms having a disease characterised by the undesired production of a protein. Diverse organisms such as bacteria, yeast, protozoa, algae, plant and higher animal forms including warm-blooded animals can be treated in this manner. The compounds can be used for treating e.g. AIDS, atherosclerosis or tumours. They can also be used in diagnostic methods for detecting the presence or absence of abnormal RNA molecules, or abnormal or inappropriate expression of normal RNA molecules in organisms or cells. (Updated on 20-MAR-2003 to correct PR field.)  
 XX  
 SQ Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 5e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149  
 ||| ||||| ||||| |||||  
 Db 21 CGCAAGAGAGAGCAACG 2

RESULT 302  
 AAX15076/c  
 ID AAX15076 standard; DNA; 21 BP.  
 XX  
 AC AAX15076;  
 XX  
 DT 20-MAR-2003 (revised)  
 DT 16-APR-1999 (first entry)  
 XX  
 XX CMV antisense chimeric oligonucleotide of the invention.  
 DE  
 XX Nuclease resistant; ribofuranosyl moiety; 2'-aminoalkoxy; tumour;  
 KW 2'-imidazolylalkoxy; modulation; activity; AIDS; atherosclerosis;  
 KW phosphorothioate; DNA-RNA hybrid; ss.  
 KW  
 XX Synthetic.

| Key           | Location/Qualifiers        |
|---------------|----------------------------|
| modified_base | 1..20                      |
|               | /*tag= a                   |
|               | /note= "phosphorothioated" |
| misc_RNA      | 4..6                       |
|               | /*tag= b                   |
| misc_RNA      | 15..18                     |
|               | /*tag= c                   |

US5872232-A.  
 16-FEB-1999.  
 06-JUN-1995; 95US-00471973.  
 11-JAN-1990; 90US-00463358.  
 13-AUG-1990; 90US-00566977.  
 12-AUG-1991; 91WO-US005720.  
 05-MAR-1992; 92US-00835932.  
 01-JUL-1992; 92US-00854634.  
 (ISIS-) ISIS PHARM INC.  
 Cook PD, Kawasaki AM;  
 WPI; 1999-166721/14.  
 New 2'-O-modified oligo-nucleotide(s) - comprising nucleotide(s) comprising a 2'-aminoalkoxy or 2'-imidazolylalkoxy substituent, used for hybridisation to RNA or DNA.  
 Example 34; Col 53; 48pp; English.

The present oligonucleotide exemplifies the oligonucleotides of the invention. Oligonucleotides of the invention are nuclease resistant, and

CC comprise covalently-bound nucleosides that individually include a ribose  
CC or deoxyribose sugar portion and base portion where the nucleosides are  
CC joined together by internucleoside linkages such that the base portion of  
CC the nucleosides form a mixed base sequence that is complementary to a RNA  
CC base sequence or to a DNA base sequence. At least one of the nucleosides  
CC has a modified ribofuranosyl moiety bearing a 2'-aminoalkoxy or 2'-  
CC imidazolylalkoxy substituent. The nuclease resistant compounds can be  
CC used for modulating the activity of DNA or RNA. They can be used for  
CC treating organisms having a disease characterised by the undesired  
CC production of a protein. Diverse organisms such as bacteria, yeast,  
CC protozoa, algae, plant and higher animal forms including warm-blooded  
CC animals can be treated in this manner. The compounds can be used for  
CC treating e.g. AIDS, atherosclerosis or tumours. They can also be used in  
CC diagnostic methods for detecting the presence or absence of abnormal RNA  
CC molecules, or abnormal or inappropriate expression of normal RNA  
CC molecules in organisms or cells. (Updated on 20-MAR-2003 to correct PR  
CC field.)  
XX  
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;  
  
Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 130 CGGATGAGAGAGATCAACG 149  
DB 21 CGCAGAGAGAGAGATCAACG 2  
  
RESULT 303  
AAZ11589/c  
ID AAZ11589 standard; DNA; 21 BP.  
XX  
AC AAZ11589;  
XX  
DT 16-NOV-1999 (first entry)  
XX  
DE Fully modified phosphorothioate oligo seq ID No: 3.  
XX  
KW Phosphorus-linked oligomer; deprotection; protic acid; ether solvent;  
KW hybridization probe; amplification primer; forensic; paleontology;  
KW antisense agent; ss.  
XX  
OS Synthetic.  
XX  
PN WO943694-A1.  
XX  
PD 02-SEP-1999.  
XX  
PF 26-FEB-1999; 99WO-US004213.  
XX  
PR 26-FEB-1998; 98US-00032972.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Krotz AH, Ravikumar VT;  
XX  
DR WPI; 1999-540559/45.  
XX  
PT Use of aromatic solvents during deprotection of 5'-hydroxy groups in  
PT solid phase synthesis of oligonucleotides.  
XX  
PS Example 5; Page 28; 42pp; English.  
XX  
CC The invention provides improved methods for synthesis of phosphorus-  
CC linked oligomers. The method comprises deprotecting a 5'-hydroxy using a  
CC protic acid in an aromatic, alkylaromatic, haloaromatic, halo-  
CC alkylaromatic or aromatic ether solvent. The phosphorus-linked oligomers  
CC particularly oligonucleotides, are useful as diagnostic or research  
CC reagents, e.g. hybridization probes or amplification primers, useful in  
CC forensics, paleontology, evolutionary studies, for screening expression  
CC libraries, sequencing etc., or as therapeutic (antisense) agents for  
CC inhibiting expression of genes or activity of transcription factors. The

CC aromatic solvents are less expensive to use than hazardous halogenated  
CC alkanes since they do not require large investments in recycling  
CC equipment to meet environmental standards for disposal. They are thus  
CC better suited for large scale operations. Sequences AAZ11587-594  
CC represent phosphorothioate oligomers synthesized using the new method of  
CC the invention  
XX  
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;  
  
Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 130 CGGATGAGAGAGATCAACG 149  
DB 21 CGCAGAGAGAGAGATCAACG 2  
  
RESULT 304  
AAZ33398/c  
ID AAZ33398 standard; DNA; 21 BP.  
XX  
AC AAZ33398;  
XX  
DT 29-JUN-1999 (first entry)  
XX  
DE Phosphorothioate 21-mer oligonucleotide #3.  
XX  
KW Phosphorothioate; sulphurised oligonucleotide; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..21  
FT /tag= a  
FT /note= "phosphorothioate linkages"  
XX  
PN WO9919340-A1.  
XX  
PD 22-APR-1999.  
XX  
PF 13-OCT-1998; 98WO-US021502.  
XX  
PR 15-OCT-1997; 97US-00950779.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Cole DL, Ravikumar VT, Cheruvallath ZS;  
XX  
DR WPI; 1999-287949/24.  
XX  
PT Preparation of Phosphorothioate oligonucleotides applicable throughout  
PT nucleic acid chemistry.  
XX  
PS Example 3; Page 8; 17pp; English.  
XX  
CC The present invention describes a method for preparing phosphorothioate  
CC oligonucleotides by phosphorylating the 5'-hydroxyl of a nucleic acid  
CC moiety in an acetonitrile containing solvent mixture to form a phosphate  
CC intermediate (II) and oxidizing (II) with an acetyl disulfide in an  
CC acetonitrile containing solvent mixture to effect conversion of the  
CC intermediate to phosphorothioate (II). The present sequence represents a  
CC phosphorothioate oligonucleotide from an example of the present  
CC invention. The method can be used to sulphurise oligonucleotides of 8-50  
CC nucleotides. The method is widely applicable throughout nucleic acid  
CC chemistry. The process allows formation of phosphorothioate linkages in  
CC the oligonucleotides or derivatives, without the need for complex solvent  
CC mixtures and repeated washing or solvent changes. The process uses a  
CC simplified solvent system and produces oligonucleotides having  
CC phosphorothioate groups with efficiency and improved yields  
XX  
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

```
Query Match      0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
DB 21 CGCAAGAAGAAGCAACG 2

RESULT 305
AAX05473/C
ID AAX05474 standard; DNA; 21 BP.
XX AC AAX05474;
XX DT 20-APR-1999 (first entry)
XX DE Chimeric 2'-O-methyl antisense oligo 4326 for CMV.
XX KW Nuclease resistant; modified; deoxyfuranosyl moiety; therapy; infection;
XX KW AIDS; atherosclerosis; tumour; CMV; antisense; DNA/RNA hybrid; ss.
XX OS Synthetic.
XX OS Human herpesvirus 5.
XX FH Key Location/Qualifiers
XX FT modified_base 1..21 /*tag= a
XX FT /*note= "contains phosphorothioate linkages; 2' O-methyl
XX FT misc_RNA 1..21 /*tag= b
XX FN US5859221-A.
XX PD 12-JAN-1999.
XX PF 06-JUN-1995; 95US-00468037.
XX PR 11-JAN-1990; 90US-00463358.
XX PR 13-AUG-1990; 90US-00566977.
XX PR 12-AUG-1991; 91WO-US005720.
XX PR 05-MAR-1992; 92US-00835932.
XX PR 01-JUL-1992; 92US-00854634.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Cook PD, Kawasaki AM;
XX DR WPI; 1999-120005/10.
XX CC Nuclease resistant oligonucleotide analogues - having nucleosides
XX CC including modified deoxyfuranosyl moiety bearing 2'-substituent to
XX CC increase binding affinity.
XX PS Example 34; Col 54; 49pp; English.
XX CC The invention relates to a nuclease resistant compound that hybridises
XX CC with RNA or DNA. The compound comprises covalently-bound nucleosides that
XX CC individually include a ribose or deoxyribose sugar portion and a base
XX CC portion, where the nucleosides are joined together by internucleoside
XX CC linkages such that the base portion of the nucleosides form a mixed base
XX CC sequence that is complementary to a RNA base sequence or to a DNA base
XX CC sequence; and where at least 1 of the nucleosides includes a modified
XX CC deoxyfuranosyl moiety bearing a 2'-substituent selected from cyano,
XX CC fluoromethyl, thioalkoxyl, alkylsulphinyl, alkylsulphonyl, allyloxy and
XX CC alkenoxy groups. The nuclease resistant oligonucleotides (ONs) can bind
XX CC to and modulate the activity of DNA or RNA and can be used for treating
XX CC organisms having a disease characterised by the undesired production of a
XX CC protein. They can be used in therapeutic or prophylactic treatment in
XX CC organisms such as bacteria, yeast, protozoa, algae, plant and higher
XX CC animal forms including warm-blooded animals. The ONs can also be used for
XX CC treating infections, AIDS, atherosclerosis or tumours. The products can
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CC be used for detection and diagnosis. The ONs provide enhanced binding to
CC targets. Increased binding of 2'-sugar modified sequence-specific ONs
CC provides superior potency and specificity compared to phosphorus-modified
CC ONs. The present sequence represents a chimeric antisense oligo for CMV
XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
Query Match      0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
DB 21 CGCAAGAAGAAGCAACG 2

RESULT 306
AAX05473/C
ID AAX05473 standard; DNA; 21 BP.
XX AC AAX05473;
XX DT 20-APR-1999 (first entry)
XX DE Chimeric 2'-O-methyl antisense oligo 4325 for CMV.
XX KW Nuclease resistant; modified; deoxyfuranosyl moiety; therapy; infection;
XX KW AIDS; atherosclerosis; tumour; CMV; antisense; DNA/RNA hybrid; ss.
XX OS Synthetic.
XX OS Human herpesvirus 5.
XX FH Key Location/Qualifiers
XX FT modified_base 1..21 /*tag= a
XX FT /*note= "contains phosphorothioate linkages; 2' O-methyl
XX FT misc_RNA 1..21 /*tag= b
XX FN US5859221-A.
XX PD 12-JAN-1999.
XX PF 06-JUN-1995; 95US-00468037.
XX PR 11-JAN-1990; 90US-00463358.
XX PR 13-AUG-1990; 90US-00566977.
XX PR 12-AUG-1991; 91WO-US005720.
XX PR 05-MAR-1992; 92US-00835932.
XX PR 01-JUL-1992; 92US-00854634.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Cook PD, Kawasaki AM;
XX DR WPI; 1999-120005/10.
XX CC Nuclease resistant oligonucleotide analogues - having nucleosides
XX CC including modified deoxyfuranosyl moiety bearing 2'-substituent to
XX CC increase binding affinity.
XX PS Example 34; Col 54; 49pp; English.
XX CC The invention relates to a nuclease resistant compound that hybridises
XX CC with RNA or DNA. The compound comprises covalently-bound nucleosides that
XX CC individually include a ribose or deoxyribose sugar portion and a base
XX CC portion, where the nucleosides are joined together by internucleoside
XX CC linkages such that the base portion of the nucleosides form a mixed base
XX CC sequence that is complementary to a RNA base sequence or to a DNA base
XX CC sequence; and where at least 1 of the nucleosides includes a modified
XX CC deoxyfuranosyl moiety bearing a 2'-substituent selected from cyano,
XX CC fluoromethyl, thioalkoxyl, alkylsulphinyl, alkylsulphonyl, allyloxy and
```

CC alkeneoxy groups. The nuclease resistant oligonucleotides (ONs) can bind  
CC to and modulate the activity of DNA or RNA and can be used for treating  
CC organisms having a disease characterised by the undesired production of a  
CC protein. They can be used in therapeutic or prophylactic treatment in  
CC organisms such as bacteria, yeast, protozoa, algae, plant and higher  
CC animal forms including warm-blooded animals. The ONs can also be used for  
CC treating infections, AIDS, atherosclerosis or tumours. The products can  
CC be used for detection and diagnosis. The ONs provide enhanced binding to  
CC targets. Increased binding of 2'-sugar modified sequence-specific ONs  
CC provides superior potency and specificity compared to phosphorus-modified  
CC ONs. The present sequence represents a chimeric antisense oligo for CMV  
XX  
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAAAACG 149  
||| ||||| |||||  
Db 21 CGCAAGAGAGAGCAAAACG 2

RESULT 307  
AAK99984/C  
ID AAK99984 standard; DNA; 21 BP.

XX AAK99984;  
AC  
DT 19-OCT-1999 (first entry)  
XX  
DE Phosphorothioate oligonucleotide #3.

XX Phosphorothioate oligonucleotide; benzyl(thio)phosphite residue; primer;  
KW benzyl(thio)phosphoramidite; probe production; linker; adapter;  
KW gene fragment; ss.  
XX  
OS Synthetic.

XX Key Location/Qualifiers  
FH modified\_base 1..21  
FT /\*tag= a  
FT /\*note= "phosphorothioate backbone"  
FT

XX WO9940101-A1.

XX 12-AUG-1999.

XX 09-FEB-1999; 99WO-US002474.

XX 10-FEB-1998; 98US-00021277.

XX (ISIS-) ISIS PHARM INC.

XX Capaldi DC, Ravikumar VT;

XX WPI; 1999-508484/42.

XX Oligonucleotide synthesis using substituted benzyl phosphoramidite for  
FT reaction with synthon having free 5'-hydroxy.

XX Example 12; Page 47; 72pp; English.

XX This sequence represents a phosphorothioate oligonucleotide synthesised  
CC using the method of the invention. The method is for the preparation of  
CC oligonucleotides containing a substituted benzyl(thio)phosphite residue  
CC comprises reacting an oligonucleotide with a 3' substituted  
CC benzyl(thio)phosphoramidite with an (oligo)nucleotide having a free 5'-  
CC hydroxy, with one of the reactants, optionally immobilised on a solid  
CC phase. The method is used to prepare oligonucleotides, or analogues, for  
CC use as probes, primers, linkers, adapters or gene fragments, for  
CC diagnostic or therapeutic use, or as research reagents. The specified  
CC substituted benzyl group can be eliminated without release of toxic

CC acrylonitrile (contrast conventional 2-cyanoethoxy protecting groups)  
XX  
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAAAACG 149  
||| ||||| |||||  
Db 21 CGCAAGAGAGAGCAAAACG 2

RESULT 308  
AAK18799/C  
ID AAK18799 standard; DNA; 21 BP.

XX AAK18799;

XX 10-MAY-1999 (first entry)

XX Target cytomegalovirus antisense oligonucleotide ISIS 2922.

XX Cellular adhesion protein; proliferation; antisense oligonucleotide;  
KW alimentary canal; transport; gastrointestinal mucosa; cancer;  
KW Alzheimer's disease; beta-thalassemia; malaria; viral infection; HIV;  
KW inflammation; ss.

XX Synthetic.

XX WO9901579-A1.

XX 14-JAN-1999.

XX 01-JUL-1998; 98WO-US013574.

XX 01-JUL-1997; 97US-0086829.

XX (ISIS-) ISIS PHARM INC.

XX Teng C, Hardee G;

XX WPI; 1999-106077/09.

XX Composition comprising nucleic acid and penetration enhancer - used  
PT particularly for delivering therapeutic antisense oligonucleotides across  
PT the gastrointestinal mucosa, provides high bioavailability.

XX Example 2; Page 112; 115pp; English.

XX A pharmaceutical composition has been developed which comprises a nucleic  
CC acid and at least one penetration enhancer. The compositions are used:  
CC (i) to treat or prevent any disease or disorder that can be treated with  
CC the nucleic acid, e.g. cancer, Alzheimer's disease, beta-thalassemia,  
CC malaria, viral infections (including human immune deficiency virus  
CC (HIV)), inflammation, in human or animal medicine; (ii) to investigate  
CC the role of a gene or gene product in non-human animals; and (iii) to  
CC modulate gene expression in cells, tissues or organs. The compositions  
CC provide bioavailability of at least 15, preferably 17-35%. The  
CC penetration enhancer improves: (i) transport of the nucleic acid across  
CC the mucosa of the alimentary canal and into cells; and (ii) increases  
CC stability of the nucleic acid. Oral administration avoids the  
CC complications and expense of intravenous or other methods of  
CC administration. AAK1869 to AAK18799 and AAK18801 represent antisense  
CC oligonucleotides which can be used as the nucleic acid in the method of  
CC the invention

XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;



ID AAZ10307 standard; DNA; 21 BP.  
XX  
AC AAZ10307;  
XX  
XX  
DT 20-MAR-2003 (revised)  
DT 08-NOV-1999 (first entry)  
XX  
XX  
DE Oligonucleotide used to inhibit CMV replication.  
XX  
XX Antisense oligonucleotide; CMV replication; nuclease resistance;  
KW RNase H strand cleavage; phosphorothioate; oligonucleotide therapeutic;  
KW AIDS; atherosclerosis; DNA/RNA hybrid; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT misc\_RNA 1..7  
FT misc\_RNA /\*tag= a  
FT misc\_RNA 16..21  
FT misc\_RNA /\*tag= b  
XX  
PN US5955589-A.  
XX  
XX 21-SEP-1999.  
XX  
XX 06-JUN-1995; 95US-00465880.  
XX  
PR 24-DEC-1991; 91US-00814961.  
PR 23-DEC-1992; 92WO-US011339.  
PR 21-JUN-1994; 94US-00244993.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
XX Monia BP, Cook PD;  
PI  
XX WPI; 1999-539598/45.  
DR  
XX  
XX Oligonucleotides eliciting RNase H activity useful for diagnosis and treatment of diseases e.g AIDS or atherosclerosis.  
PT  
PS Example 17; Col 27; 34pp; English.  
XX  
XX The present sequence represents a phosphorothioate antisense oligonucleotide used to inhibit cauliflower mosaic virus (CMV) replication. The oligonucleotide is a gapped 2' modified oligonucleotide, whereby one part has at least two consecutive 2'-P (2'-H) nucleotides and the second part has at least five consecutive nucleotides with 2'-H sugar moieties. The modified oligonucleotide has increased nuclease resistance, and increased binding affinity for substrates. The oligonucleotide elicits RNase H strand cleavage of specific RNAs. Oligonucleotides of the invention are useful for the diagnosis, detection and treatment of conditions susceptible to oligonucleotide therapeutics (e.g. AIDS and atherosclerosis). (Updated on 20-MAR-2003 to correct PR field.)  
XX  
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;  
  
Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 130 CGGATGAGAGATCAACG 149  
DB 21 CGCAAGAGAGAGCAACG 2  
  
RESULT 312  
AAZ23678/C  
ID AAZ23678 standard; DNA; 21 BP.  
XX  
AC AAZ23678;  
XX  
XX 18-JUN-1999 (first entry)  
DT  
XX

DE Deletion sequence oligonucleotide 131.  
XX  
XX Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen;  
KW probe; cellular adhesion modulator; cellular proliferation modulator;  
KW human retrovirus; human immunodeficiency virus; non-human retrovirus;  
KW HIV; primer; ss.  
XX  
OS Synthetic.  
XX  
PN WO9911820-A1.  
XX  
PD 11-MAR-1999.  
XX  
XX 01-SEP-1998; 98WO-US018084.  
XX  
XX 02-SEP-1997; 97US-00923771.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Chen D, Srivatsa GS;  
XX  
XX WPI; 1999-205198/17.  
DR  
XX  
XX New compositions comprising sensor arrays made up of unique probe oligonucleotides - useful for characterizing a sample of target deletion oligonucleotides.  
PT  
PT  
XX  
PS Example 9; Page 145; 163pp; English.  
XX  
XX This invention describes a novel composition comprising a number of sensor arrays, where each array comprises a unique probe oligonucleotide, which is the reverse complement of part of a unique target oligonucleotide present in a mixture of target deletion sequence oligonucleotides. The compositions form a method for characterizing a sample of target deletion oligonucleotides which are labelled and hybridize with the probe oligonucleotides of the sensor arrays. Such oligonucleotides and their targets are represented in AAX23548-X23709.  
XX  
XX Oligonucleotides characterized by the method form pharmaceutical compositions that are useful for modulating cellular adhesion or proliferation, and being active against a eukaryotic pathogen, a human retrovirus, a human immunodeficiency virus (HIV), or a non-human retrovirus, including influenza virus, Epstein-Barr virus, Respiratory Syncytial Virus or cytomegalovirus (CMV). The compositions enable characterization of deletion sequence oligonucleotides having related, but different nucleobase sequences, and quantification of different species of deletion sequence ("target") oligonucleotides in a mixture. Also, if the specificity of the oligonucleotide's nucleobase sequence for its reverse complement is not modified, the method may be performed using oligodioxynucleotides  
XX  
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;  
  
Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 130 CGGATGAGAGATCAACG 149  
DB 21 CGCAAGAGAGAGCAACG 2  
  
RESULT 313  
AAZ23548/C  
ID AAX23548 standard; DNA; 21 BP.  
XX  
AC AAX23548;  
XX  
XX 18-JUN-1999 (first entry)  
DT  
XX  
XX Deletion sequence oligonucleotide 1.  
DE  
XX  
KW Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen; probe; cellular adhesion modulator; cellular proliferation modulator;  
KW

human retrovirus; human immunodeficiency virus; non-human retrovirus;  
HIV; primer; ss.  
Synthetic.  
WO9911820-A1.  
11-MAR-1999.  
01-SEP-1998; 98WO-US018064.  
02-SEP-1997; 97US-00923771.  
(ISIS-) ISIS PHARM INC.  
Chen D, Srivatsa GS;  
WPI; 1999-205198/17.  
New compositions comprising sensor arrays made up of unique probe  
oligonucleotides - useful for characterizing a sample of target deletion  
oligonucleotides.  
Example 1; Page 89; 163pp; English.  
This invention describes a novel composition comprising a number of  
sensor arrays, where each array comprises a unique probe oligonucleotide,  
which is the reverse complement of part of a unique target  
oligonucleotide present in a mixture of target deletion sequence  
oligonucleotides. The compositions form a method for characterizing a  
sample of target deletion oligonucleotides which are labelled and  
hybridize with the probe oligonucleotides of the sensor arrays. Such  
oligonucleotides and their targets are represented in AAM23548-X23709.  
Oligonucleotides characterized by the method form pharmaceutical  
compositions that are useful for modulating cellular adhesion or  
proliferation, and being active against a eukaryotic pathogen, a human  
retrovirus, a human immunodeficiency virus (HIV), or a non-human  
retrovirus, including influenza virus, Epstein-Barr virus, Respiratory  
Syncytial Virus or cytomegalovirus (CMV). The compositions enable  
characterization of deletion sequence oligonucleotides having related,  
but different nucleobase sequences, and quantification of different  
species of deletion sequence ("target") oligonucleotides in a mixture.  
Also, if the specificity of the oligonucleotide's nucleobase sequence for  
its reverse complement is not modified, the method may be performed using  
oligodeoxynucleotides

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149  
Db 21 CGCAAGAAGAGACCAACG 2

RESULT 314  
AAV99279  
ID AAV99279 standard; DNA; 21 BP.  
AC AAV99279;  
XX  
XX 09-MAR-1999 (first entry)  
XX  
XX HIV 5' UTR homology region and cellular regulatory factor (c-abl).  
XX  
XX defibrotide; polyanion salt; HIV; protozoan infection; schistosoma;  
KW Schistosoma leishmania; trypanosoma; fungus infection;  
KW Pneumocystis carinii; malaria; viral infection; genetic disease;  
KW Duchenne's muscular dystrophy; Down's syndrome; degenerative disease;  
KW neoplasia; cancer; skin condition; drug resistance; ss.  
XX

OS Synthetic.  
OS Human immunodeficiency virus.  
XX  
XX WO9848843-A1.  
XX  
XX 05-NOV-1998.  
XX  
XX 28-APR-1998; 98WO-US008357.  
XX  
XX 28-APR-1997; 97US-00848013.  
XX  
XX (BURC/) BURCOGLU A.  
XX  
XX Burcoglu A;  
XX  
XX WPI; 1999-034643/03.  
XX  
XX Use of defibrotide nucleic acid components - for treating e.g. infectious  
diseases, genetic diseases, degenerative diseases, DNA damage, neoplasia  
and skin disease, particularly HIV infection.  
XX  
XX Claim 33; Page 84; 96pp; English.  
XX  
XX Oligonucleotides AAV99271-80 represent modified defibrotide sequences  
containing a Human immunodeficiency virus (HIV) homology region and a  
cellular regulatory factor. Defibrotide is a polyanion salt of a  
deoxyribonucleic acid obtained from mammalian tissue. The products can be  
used for treating diseases such as infectious disease such as HIV  
infection, protozoan infection, schistosoma infection e.g. Schistosoma  
japonicum, Schistosoma leishmania infection, Trypanosoma infection e.g.  
Trypanosoma Cruzi, and fungus infection e.g. Candida tropicalis and  
Candida Albicans, Aspergillus infection, Pneumocystis carinii infection,  
Malaria, Plasmodium vivax, gram negative bacterial infection,  
Cytomegalovirus infection, Hepatitis virus infection, human papilloma  
virus infection; genetic diseases e.g. Duchenne's muscular dystrophy and  
Down's syndrome; degenerative diseases e.g. encephalopathy, dementia,  
Alzheimer's disease, Parkinson's disease, neuropathy, cardiomyopathy,  
aging, Kearn's Sayre syndrome, retinitis pigmentosa, ataxia, seizures,  
proximal muscle weakness, Leber's hereditary optic neuropathy, optic  
neuritis, and radiation damage; neoplasia, e.g. lympho-proliferative  
diseases, lymphomas, Kaposi's sarcoma, pancreatic cancer, neuroblastoma,  
leukemia, bladder carcinoma, breast cancer, skin cancer, lung cancer, and  
colon cancer; and skin diseases, e.g. molluscum contagiosum, bacillary  
angiomatosis, seborrheic dermatitis, psoriasis, Reiter's syndrome, insect  
bite reaction, Staphylococcal folliculitis, Eosinophilic folliculitis. In  
addition a drug resistance can be treated via administering the nucleic  
acid components of defibrotide and the variants in combination with the  
drug, e.g. a protease inhibitor

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 950 ACTGCCACCGCAGAGGTG 969  
Db 1 AGTGCAACCGCAGAGGTG 20

RESULT 315  
AAC62738/c  
ID AAC62738 standard; DNA; 21 BP.  
XX  
XX AAC62738;  
XX  
XX 05-FEB-2001 (first entry)  
XX  
XX Phosphorothioate oligonucleotide ISIS-2922.  
XX  
XX Phosphorothioate; lipid; liposome; drug deliver; ss.  
XX  
XX Unidentified.  
OS



```
XX PN WO200059474-A1.
XX PD 12-OCT-2000.
XX PF 06-APR-2000; 2000WO-US009473.
XX PR 06-APR-1999; 99US-00287175.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Leamon CP;
XX PI WPI; 2000-679320/66.
XX DR
XX PT New pro-cationic lipid compounds useful as components of liposomes used
XX PT as vehicles for delivering pharmaceutical agents into cells.
XX PS Disclosure; Page 31; 65pp; English.
XX PS
XX CC The present oligonucleotide is given in a specification disclosing a new
XX CC lipid compound and its salts, solvates and hydrates. The compound
XX CC comprises a hydrophobic tail part covalently linked to a hydrophilic head
XX CC part. A region proximal to the hydrophobic tail part has a net positive
XX CC charge at physiological pH and a region distal to the hydrophobic tail
XX CC part has a net negative charge at physiological pH. A disulphide bond
XX CC connects the regions. The lipid compound is useful for the construction
XX CC of liposomes used as vehicles for delivering pharmaceutical agents into
XX CC cells. The lipids and liposomes are fusogenic with membranes and deliver
XX CC pharmaceutical agents to tissues or cells without inherent aggregation,
XX CC which reduces toxicity
XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAGAGAGCAACG 2

RESULT 316
AAC62741/c
ID AAC62741 standard; DNA; 21 BP.
XX AC AAC62741;
XX DT 05-FEB-2001 (first entry)
XX DE Phosphorothioate oligonucleotide ISIS-13312.
XX KW Phosphorothioate; lipid; liposome; drug deliver; ss.
XX OS Unidentified.
XX OS WO200059474-A1.
XX PN 12-OCT-2000.
XX PF 06-APR-2000; 2000WO-US009473.
XX PR 06-APR-1999; 99US-00287175.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Leamon CP;
XX PI WPI; 2000-679320/66.
XX DR
XX PT New pro-cationic lipid compounds useful as components of liposomes used
XX PT as vehicles for delivering pharmaceutical agents into cells.
```

```
XX PS Disclosure; Page 31; 65pp; English.
XX CC The present oligonucleotide is given in a specification disclosing a new
XX CC lipid compound and its salts, solvates and hydrates. The compound
XX CC comprises a hydrophobic tail part covalently linked to a hydrophilic head
XX CC part. A region proximal to the hydrophobic tail part has a net positive
XX CC charge at physiological pH and a region distal to the hydrophobic tail
XX CC part has a net negative charge at physiological pH. A disulphide bond
XX CC connects the regions. The lipid compound is useful for the construction
XX CC of liposomes used as vehicles for delivering pharmaceutical agents into
XX CC cells. The lipids and liposomes are fusogenic with membranes and deliver
XX CC pharmaceutical agents to tissues or cells without inherent aggregation,
XX CC which reduces toxicity
XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAGAGAGCAACG 2

RESULT 317
AAC61632
ID AAC61632 standard; DNA; 21 BP.
XX AC AAC61632;
XX DT 19-FEB-2001 (first entry)
XX DE Mismatch reporter probe used to detect human lymphotoxin gene alleles.
XX KW Human; lymphotoxin; bioelectronic microchip;
XX KW single nucleotide polymorphism; probe; ss.
XX OS Homo sapiens.
XX PN WO200058522-A1.
XX PD 05-OCT-2000.
XX PF 28-MAR-2000; 2000WO-US008617.
XX PR 30-MAR-1999; 99US-0126865P.
XX PA (NANO-) NANOGEN INC.
XX PI Giles PN, Dillon PJ, Wu DJ, Foster CB, Chanock SJ;
XX PI WPI; 2000-638354/61.
XX PT Detecting single nucleotide polymorphism by utilizing a bioelectronic
XX PT microchip having several test sites.
XX PS Example 3; Page 17; 46pp; English.
XX CC Reporter probes AAC61629-32 were used to detect human lymphotoxin gene
XX CC alleles. The method of the invention was used for detecting single
XX CC nucleotide polymorphisms (SNPs) in the lymphotoxin gene. The method
XX CC utilises electronic circuitry on silicon microchips. The method provides
XX CC accurate discrimination of amplified DNA samples following electronic
XX CC transport, concentration, and attachment of DNA to selected electrodes
XX CC (test sites). The test sites make up organised arrays of samples that are
XX CC distinguished by using internal controls of dual labelled reporters
XX CC comprising wild type and mismatched sequences to validate the SNP
XX CC genotype. Multiples of SNPs in target nucleic acids from a patient sample
XX CC source or a SNP in target nucleic acids of multiple patient sample
XX CC sources can also be detected using the electronically addressable
XX CC microchip
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```
XX SQ Sequence 21 BP; 1 A; 8 C; 3 G; 9 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1688 TCTTCCCTGCTTACTCCTG 1707
| | | | | | | | | | | | | | | | | | | | |
Dd 2 TCTGCCAATGCTTCTCTCTG 21

RESULT 318
AAZ48640/C
ID AAZ48640 standard; DNA; 21 BP.
AC AAZ48640;
XX
XX 07-MAR-2000 (first entry)
XX
XX HCMV antisense inhibitor, ISIS-2922.
XX
XX Antisense inhibitor; oligonucleotide delivery agent; erythema multiforme;
XX expression modulator; cellular adhesion protein; malignant melanoma;
XX cellular proliferation modification; toxic epidermal necrolysis;
XX psoriasis; lichen planus; carcinoma; Paget's disease; Kaposi's sarcoma;
XX pulmonary fibrosis; Lyme disease; infection; therapy; HCMV; ss.
XX
XX Synthetic.
XX
XX WO9960167-A1.
XX
XX 25-NOV-1999.
XX
XX 20-MAY-1999; 99WO-US011142.
XX
XX 21-MAY-1998; 98US-00082336.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Mehta R, Hardee GE, Cook PD, Ecker DJ, Teai YJ, Templin MV;
XX WPI; 2000-062467/05.
XX
XX
XX New oligonucleotide compositions for topical delivery, used for the
XX delivery of bioactive agents for, e.g. modulating expression of a
XX cellular adhesion protein.
XX
XX Disclosure; Page 47; 94pp; English.
XX
XX This sequence represents an antisense inhibitor of HCMV. The invention
XX relates to a pharmaceutical composition comprises an oligonucleotide (ON)
XX admixed with a topical delivery agent. The compositions can be used for
XX the delivery of a ribozyme, an external guide sequence, an antisense ON,
XX an antisense peptide nucleic acid, an aptamer or a molecular decoy. The
XX ONs can be used to modulate expression of a cellular adhesion protein or
XX modulate a rate of cellular proliferation. The compositions can also be
XX used to treat psoriasis. They can also be used to treat e.g. lichen
XX planus, toxic epidermal necrolysis, erythema multiforme, basal cell
XX carcinoma, squamous cell carcinoma, malignant melanoma, Paget's disease,
XX Kaposi's sarcoma, pulmonary fibrosis, Lyme disease and viral, fungal and
XX bacterial infections of the skin. They can be used to treat humans and
XX primates, avians including chickens and turkeys, domestic household,
XX sport or farm animals including rats, mice, rabbits and guinea pigs,
XX fish, reptiles and zoo animals. The compositions and methods may also be
XX used to examine the function of various proteins and genes in vitro in
XX cultured or preserved dermal tissues and in animals
XX
XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
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```
QY 130 CGGATCAGACAGATCAACG 149
| | | | | | | | | | | | | | | | | | | | |
Dd 21 CGCAGAGAGAGACAAACG 2

RESULT 319
AAA39246
ID AAA39246 standard; DNA; 21 BP.
XX
XX AAA39246;
AC
XX
XX 07-SEP-2000 (first entry)
XX
XX Mouse type II hair keratin clone pmKII-6 3'-noncoding region PCR primer.
XX
XX Hair; keratin; hair cleansing composition; pre-shampoo; shampoo;
XX conditioning rinse; hair styling; gel; spray; mousse; dyeing; bleaching;
XX tinting; nail care product; nail polish remover; nail polish; PCR primer;
XX ss.
XX
XX Mus sp.
XX
XX WO200023039-A2.
XX
XX 27-APR-2000.
XX
XX 18-OCT-1999; 99WO-US024426.
XX
XX 16-OCT-1998; 98US-00174186.
XX
XX (ENSL/) ENSLEY B D.
XX
XX Ensley BD;
XX
XX WPI; 2000-339487/29.
XX
XX Formulating hair treatment composition useful for producing hair
XX preparations for improved hair characteristics by using human keratin
XX allelic variants, which has not been cross-linked.
XX
XX Example 3; Page 43; 55pp; English.
XX
XX The present invention describes a method for formulating a hair treatment
XX composition by using non-naturally occurring human keratin protein which
XX has not been previously cross-linked. The method is useful for producing
XX hair treatment composition for improved hair characteristics, and hair
XX treatment preparations tailored to an individual's preference. The
XX keratin is added to hair cleansing compositions, e.g. pre-shampoo,
XX shampoo, or conditioning rinse, to hair styling or shaping compositions,
XX e.g. gel, spray or mousse, or in hair dyeing, bleaching or tinting
XX compositions. It may also be used in developing nail care products, such
XX as nail polish and nail polish remover. The method provides hair
XX treatment preparations tailored to the individual's preferences as well
XX as to the manufacturers' preferences of hair treatment compositions. The
XX present sequence represents a PCR primer for the murine type II hair
XX keratin clone pmKII-6 3'-noncoding region, which is used in an example
XX from the present invention
XX
XX SQ Sequence 21 BP; 3 A; 7 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1468 CTGGGGCAGCGGATCCACAA 1487
| | | | | | | | | | | | | | | | | | | | |
Dd 1 CTGGGGCAGCGGATCCCTCCA 20

RESULT 320
AAZ40364/C
ID AAZ40364 standard; DNA; 21 BP.
```

|            |   |
|------------|---|
| XX         | AAZ40364;   |
| AC         |   |
| XX         | 02-MAR-2000 (first entry)   |
| DT         |   |
| XX         | Antisense inhibitor of HCMV, ISIS-2922.                                     |
| DE         |   |
| XX         |   |
| XX         | Antisense oligonucleotide; inhibitor; pulmonary delivery composition;       |
| KW         | gene expression modulation; asthma; lung cancer; pulmonary fibrosis;        |
| KW         | rhinovirus; tuberculosis; bronchitis; pneumonia; pulmonary disorder;        |
| KW         | viral disease; obstructive lung disorder; pulmonary embolism; emphysema;    |
| KW         | anaphylaxis; chronic obstructive pulmonary disease; COPD; bronchiectasis;   |
| KW         | chronic bronchitis; cystic fibrosis; therapy; HCMV; ss.                     |
| XX         |   |
| OS         | Synthetic.  |
| XX         |   |
| PN         | WO9960010-Al.   |
| XX         |   |
| PD         | 25-NOV-1999.  |
| XX         |   |
| XX         | 20-MAY-1999; 99WO-US011214.   |
| PF         |   |
| XX         | 21-MAY-1998; 98US-00083585.   |
| PR         |   |
| XX         | (ISIS-) ISIS PHARM INC.   |
| XX         |   |
| XX         | Bennett CF, Ecker DJ, Cook PD;  |
| PI         |   |
| XX         | WPI; 2000-062437/05.  |
| DR         |   |
| XX         | Composition for pulmonary delivery useful for treating and diagnosing       |
| PT         | pulmonary diseases such as asthma, tuberculosis, etc.                       |
| PT         |   |
| XX         |   |
| PS         | Claim 54; Page 33; 85pp; English.   |
| XX         |   |
| CC         | This sequence represents an antisense inhibitor of HCMV. The invention      |
| CC         | relates to a pharmaceutical composition (C) for pulmonary delivery of an    |
| CC         | oligonucleotide, comprising at least one oligonucleotide or its             |
| CC         | bioequivalent. (C) can be used to investigate the role of a gene or gene    |
| CC         | product in an animal other than human. (C) is also useful in a method of    |
| CC         | modulating the expression of a gene in an animal. (C) is useful in          |
| CC         | treating or diagnosing asthma, lung cancer, pulmonary fibrosis,             |
| CC         | rhinovirus, tuberculosis, bronchitis, pneumonia. The oligonucleotides are   |
| CC         | useful in determining the nature, function and potential relationship to    |
| CC         | body or disease status in animal of various genetic components of the       |
| CC         | body. (C) is useful for therapeutic, palliative or prophylactic treatment   |
| CC         | or to prevent the onset or recurrence of the diseases associated with       |
| CC         | pulmonary disorders. (C) is also useful in the treatment of diseases        |
| CC         | caused by viruses (such as respiratory syncytial virus, Hemophilus          |
| CC         | influenza, parainfluenza, etc.), obstructive lung disorders (such as        |
| CC         | pulmonary emphysema or anaphylaxis), chronic obstructive pulmonary diseases |
| CC         | (COPD), emphysema, chronic bronchitis, bronchiectasis and cystic            |
| CC         | fibrosis. (C) administered through pulmonary delivery overcomes the         |
| CC         | complication and expenses associated with other routes of administration.   |
| CC         | Modified or substituted oligonucleotides have enhanced cellular uptake,     |
| CC         | target binding and increased stability in the presence of nucleases.        |
| CC         | Pulmonary administration of phosphodiester oligonucleotides lowers the      |
| CC         | level of nuclease activity in lung tissue to afford phosphodiester          |
| CC         | oligonucleotides longer lifetimes in lung tissue                            |
| XX         |   |
| SQ         | Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;                          |
|            |   |
|            | Query Match 0.9%; Score 15.2; DB 1; Length 21;                              |
|            | Best Local Similarity 85.0%; Pred. No. 5e+02;                               |
|            | Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;                 |
| QY         | 130 CGGATGAAGAATCAACG 149   |
|            |   |
| DB         | 21 CGCAAGAGAGACAAACG 2  |
|            |   |
| RESULT 321 |   |
| AAZ47919/c |   |

| Matches    | 17;         | Conservative   | 0;  | Mismatches | 3; | Indels | 0; | Gaps | 0 |
|------------|-------------|--|-----|------------|----|--------|----|------|---|
| QY         | 130         | CGGATGAGAGATCAAAACG  | 149 |            |    |        |    |      |   |
| DB         | 21          | CGCAAGAGAGAGCAAAACG  | 2   |            |    |        |    |      |   |
| RESULT 323 |             |  |     |            |    |        |    |      |   |
| AAZ49391/C |             |  |     |            |    |        |    |      |   |
| ID         | AAZ49391    | standard; DNA; 21 BP.  |     |            |    |        |    |      |   |
| XX         | XX          |  |     |            |    |        |    |      |   |
| AC         | AAZ49391;   |  |     |            |    |        |    |      |   |
| DT         | 14-MAR-2000 | (first entry)  |     |            |    |        |    |      |   |
| XX         | XX          |  |     |            |    |        |    |      |   |
| DE         | XX          | HCMV targeted phosphorothioate antisense oligonucleotide ISIS 13312.     |     |            |    |        |    |      |   |
| KW         | XX          | Viral infection; expression; modulation; antisense; non-parenteral;      |     |            |    |        |    |      |   |
| KW         | XX          | delivery; uptake; administration; emulsion; ulcerative colitis;          |     |            |    |        |    |      |   |
| KW         | XX          | Crohn's disease; inflammatory bowel disease; cellular proliferation;     |     |            |    |        |    |      |   |
| XX         | XX          | HCMV; human cytomegalovirus; ss.   |     |            |    |        |    |      |   |
| OS         | XX          | Synthetic.   |     |            |    |        |    |      |   |
| OS         | XX          | Human herpesvirus 5.   |     |            |    |        |    |      |   |
| PH         | XX          | Key  |     |            |    |        |    |      |   |
| FT         | XX          | Location/Qualifiers  |     |            |    |        |    |      |   |
| FT         | XX          | modified_base 1..21  |     |            |    |        |    |      |   |
| FT         | XX          | /*tag= a   |     |            |    |        |    |      |   |
| FT         | XX          | /mod_base= OTHER   |     |            |    |        |    |      |   |
| FT         | XX          | /note= "Phosphorothioate linkages"                                       |     |            |    |        |    |      |   |
| FT         | XX          | modified_base 1..7   |     |            |    |        |    |      |   |
| FT         | XX          | /*tag= b   |     |            |    |        |    |      |   |
| FT         | XX          | /mod_base= OTHER   |     |            |    |        |    |      |   |
| FT         | XX          | /note= "2'-methoxyethoxy oligonucleotides"                               |     |            |    |        |    |      |   |
| FT         | XX          | modified_base 2  |     |            |    |        |    |      |   |
| FT         | XX          | /*tag= c   |     |            |    |        |    |      |   |
| FT         | XX          | /mod_base= m5c   |     |            |    |        |    |      |   |
| FT         | XX          | modified_base 8  |     |            |    |        |    |      |   |
| FT         | XX          | /*tag= d   |     |            |    |        |    |      |   |
| FT         | XX          | /mod_base= m5c   |     |            |    |        |    |      |   |
| FT         | XX          | modified_base 10   |     |            |    |        |    |      |   |
| FT         | XX          | /*tag= e   |     |            |    |        |    |      |   |
| FT         | XX          | /mod_base= m5c   |     |            |    |        |    |      |   |
| FT         | XX          | modified_base 13   |     |            |    |        |    |      |   |
| FT         | XX          | /*tag= f   |     |            |    |        |    |      |   |
| FT         | XX          | /mod_base= m5c   |     |            |    |        |    |      |   |
| FT         | XX          | modified_base 15..20   |     |            |    |        |    |      |   |
| FT         | XX          | /*tag= g   |     |            |    |        |    |      |   |
| FT         | XX          | /mod_base= OTHER   |     |            |    |        |    |      |   |
| FT         | XX          | /note= "2'-methoxyethoxy oligonucleotides"                               |     |            |    |        |    |      |   |
| FT         | XX          | modified_base 15   |     |            |    |        |    |      |   |
| FT         | XX          | /*tag= h   |     |            |    |        |    |      |   |
| FT         | XX          | /mod_base= m5c   |     |            |    |        |    |      |   |
| FT         | XX          | modified_base 20   |     |            |    |        |    |      |   |
| FT         | XX          | /*tag= i   |     |            |    |        |    |      |   |
| FT         | XX          | /mod_base= m5c   |     |            |    |        |    |      |   |
| XX         | XX          | WO9960012-A1.  |     |            |    |        |    |      |   |
| PN         | XX          | 25-NOV-1999.   |     |            |    |        |    |      |   |
| XX         | XX          | 20-MAY-1999; 99WO-US011394.  |     |            |    |        |    |      |   |
| XX         | XX          | 21-MAY-1998; 98US-00082624.  |     |            |    |        |    |      |   |
| XX         | XX          | (ISIS-) ISIS PHARM INC.  |     |            |    |        |    |      |   |
| PI         | XX          | Teng C, Cook PD, Tillman L, Hardee GE, Ecker DJ, Manoharan M;            |     |            |    |        |    |      |   |
| XX         | XX          | WPI; 2000-072428/06.   |     |            |    |        |    |      |   |
| XX         | XX          | New oligonucleotide compositions used for the non-parenteral delivery of |     |            |    |        |    |      |   |
| PT         | XX          | e.g. antisense oligos, ribozymes, peptide nucleic acids, molecular       |     |            |    |        |    |      |   |
| PT         |             |  |     |            |    |        |    |      |   |

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;

Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other; XX SO

New oligonucleotide compositions used for the non-parenteral delivery of e.g. antisense oligos, ribozymes, peptide nucleic acids, molecular

PT decoys, external guide sequences or aptamers.

XX Claim 80; Page 37; 133pp; English.

XX Sequences AA249374-249383, AA249389 and AA249391 represent antisense  
PS oligonucleotides designed to have therapeutic activity against certain  
XX non-retroviral viruses. The invention relates to new compositions for the  
CC oligonucleotide in an emulsion. Oligonucleotides comprising at least one  
CC non-parenteral delivery of oligonucleotides delivered via the  
CC oligonucleotide in an emulsion. Oligonucleotides comprising at least one  
CC compositions of the invention can be used to modulate expression of a  
CC cellular adhesion protein, modulate a rate of cellular proliferation, or  
CC have biological activity against eukaryotic pathogens or retroviruses.  
CC They can be used for treating conditions including e.g., ulcerative  
CC colitis, Crohn's disease, inflammatory bowel disease or undue cellular  
CC proliferation. The compositions can enhance the local and systemic uptake  
CC and delivery of nucleic acids via non-parenteral routes of administration  
CC (e.g., via the alimentary canal, skin, eyes, pulmonary tract, urethra or  
CC vagina)

XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. Se+02; 3; Indels 0; Gaps 0;  
Matches 17; Conservative 0; Mismatches

QY 130 CGGATGAGAGAGATCAAAACG 149

DB 21 CGCAGAGAGAGAGAGAGAGAG 2

RESULT 324

AA249383/c

ID AA249383 standard; DNA; 21 BP.

XX AA249383;

XX 14-MAR-2000 (first entry)

DE HCMV targetted phosphorothioate antisense oligonucleotide ISIS 2922.

XX Viral infection; expression; modulation; antisense; non-parenteral;  
XX delivery; uptake; administration; emulsion; ulcerative colitis;  
XX Crohn's disease; inflammatory bowel disease; cellular proliferation;  
XX HCMV; human cytomegalovirus; ss.

XX Synthetic.

OS Human herpesvirus 5.

OS Key Location/Qualifiers

PH modified\_base 1..21

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Phosphorothioate linkages"

XX WO9960012-A1.

XX 25-NOV-1999.

XX 20-MAY-1999; 99WO-US011394.

XX 21-MAY-1998; 98US-00082624.

XX (ISIS-) ISIS PHARM INC.

XX Teng C, Cook PD, Tillman L, Hardee GE, Ecker DJ, Manoharan M;

XX WPI; 2000-072428/06.

XX New oligonucleotide compositions used for the non-parenteral delivery of  
XX e.g. antisense oligos, ribozymes, peptide nucleic acids, molecular  
XX decoys, external guide sequences or aptamers.

XX Claim 80; Page 37; 133pp; English.

XX

CC Sequences AA249374-249383, AA249389 and AA249391 represent antisense  
CC oligonucleotides designed to have therapeutic activity against certain  
CC non-retroviral viruses. The invention relates to new compositions for the  
CC non-parenteral delivery of oligonucleotides comprising at least one  
CC oligonucleotide in an emulsion. Oligonucleotides delivered via the  
CC compositions of the invention can be used to modulate expression of a  
CC cellular adhesion protein, modulate a rate of cellular proliferation, or  
CC have biological activity against eukaryotic pathogens or retroviruses.  
CC They can be used for treating conditions including e.g., ulcerative  
CC colitis, Crohn's disease, inflammatory bowel disease or undue cellular  
CC proliferation. The compositions can enhance the local and systemic uptake  
CC and delivery of nucleic acids via non-parenteral routes of administration  
CC (e.g., via the alimentary canal, skin, eyes, pulmonary tract, urethra or  
CC vagina)

XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. Se+02; 3; Indels 0; Gaps 0;  
Matches 17; Conservative 0; Mismatches

QY 130 CGGATGAGAGAGATCAAAACG 149

DB 21 CGCAGAGAGAGAGAGAGAGAG 2

RESULT 325

AA248172/c

ID AA248172 standard; DNA; 21 BP.

XX AA248172;

XX 14-MAR-2000 (first entry)

XX CMV replication chimeric phosphorothioate oligonucleotide SEQ ID NO:19.

XX Polyribonucleotide solid phase synthesis; diagnosis; hybridisation;  
XX protein production modulation; 2'-deoxyfuranosyl moiety; anti-HIV;  
XX antiarteriosclerotic; nuclease resistant; atherosclerosis; AIDS;  
XX abnormal cell proliferation; tumour formation; ss.

XX Synthetic.

XX US6005087-A.

XX 21-DEC-1999.

XX 05-MAR-1998; 98US-00035357.

XX 11-JAN-1990; 90US-00463358.

XX 13-AUG-1990; 90US-00566977.

XX 12-AUG-1991; 91WO-US005720.

XX 03-MAR-1992; 92US-00835932.

XX 01-JUL-1992; 92US-00854634.

XX 06-JUN-1995; 95US-00468037.

XX (ISIS-) ISIS PHARM INC.

XX Kawasaki AM, Cook PD;

XX WPI; 2000-072074/06.

XX Nuclease resistant oligonucleotides useful as research agents, diagnostic

XX agents, and in the treatment of atherosclerosis and AIDS.

XX Example 34; Col 54; 49pp; English.

XX The present invention describes nuclease resistant oligonucleotides (I)  
XX comprising 2'-fluoro modified ribofuranosyl nucleotides. (II) comprise  
XX covalently bound nucleotides, where the nucleotides are joined together  
XX by: (a) internucleotide linkages such that the base portion of the  
XX nucleotides forms a mixed base sequence; and (b) at least one of the

CC nucleotides includes a modified ribofuranosyl group bearing a 2'-fluoro  
 CC substituent; provided that at least two of the nucleotides are 2'-fluoro  
 CC modified ribofuranosyl nucleotides when the internucleotide linkages are  
 CC phosphodiester nucleotides. (I) bind to their target mRNA and inhibit its  
 CC expression. (I) are resistant to nuclease degradation and hybridise with  
 CC appropriate strength and fidelity to its target RNA/DNA. (I) are also  
 CC useful as research agents, diagnostic agents and as oligonucleotide  
 CC therapeutics. (I) may be used to treat atherosclerosis following  
 CC angioplasty to prevent reocclusion of the treated arteries. (I) may also  
 CC be used in conjunction with AZT to treat AIDS patients. (I) have been  
 CC used to modulate the expression of RAR gene, a cellular gene whose  
 CC tumour formation. (I) are also used to modulate the expression of protein  
 CC kinase C. (I) exhibit hybridisation properties of higher quality than  
 CC phosphorous modified oligonucleotide duplexes containing  
 CC methylphosphonates, phosphoramidates and phosphate triesters. The present  
 CC sequence represent an oligonucleotide used in the exemplification of the  
 CC present invention

XX  
 SQ Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;  
 Query Match 0.9%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 5e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAGATCAACG 149  
 Db 21 CGCAGAAGAAGAGCAACG 2

RESULT 326  
 AAZ48171/C  
 ID AAZ48171 standard; DNA; 21 BP.  
 XX AC AAZ48171;  
 XX DT 14-MAR-2000 (first entry)  
 XX DE CMV replication chimeric phosphorothioate oligonucleotide SEQ ID NO:18.  
 XX KW Polyrbonucleotide solid phase synthesis; diagnosis; hybridisation;  
 XX protein production modulation; 2'-deoxyfuranosyl moiety; anti-HIV;  
 XX antiarteriosclerotic; nuclease resistant; atherosclerosis; AIDS;  
 XX abnormal cell proliferation; tumour formation; ss.  
 XX OS Synthetic.  
 XX PN US6005087-A.  
 XX PD 21-DEC-1999.  
 XX PF 05-MAR-1998; 98US-00035357.  
 XX PR 11-JAN-1990; 90US-00463358.  
 XX PR 13-AUG-1990; 90US-00566977.  
 XX PR 12-AUG-1991; 91WO-US005720.  
 XX PR 05-MAR-1992; 92US-00835932.  
 XX PR 01-JUL-1992; 92US-00854634.  
 XX PR 06-JUN-1995; 95US-00468037.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Kawasaki AM, Cook PD;  
 XX DR WPI; 2000-072074/06.  
 XX PT Nuclease resistant oligonucleotides useful as research agents, diagnostic  
 XX agents, and in the treatment of atherosclerosis and AIDS.  
 XX PS Example 34; Col 54; 49pp; English.  
 XX CC The present invention describes nuclease resistant oligonucleotides (I)  
 CC comprising 2'-fluoro modified ribofuranosyl nucleotides. (I) comprise

CC covalently bound nucleotides, where the nucleotides are joined together  
 CC by: (a) internucleotide linkages such that the base portion of the  
 CC nucleotides forms a mixed base sequence; and (b) at least one of the  
 CC nucleotides includes a modified ribofuranosyl group bearing a 2'-fluoro  
 CC substituent; provided that at least two of the nucleotides are 2'-fluoro  
 CC modified ribofuranosyl nucleotides when the internucleotide linkages are  
 CC phosphodiester nucleotides. (I) bind to their target mRNA and inhibit its  
 CC expression. (I) are resistant to nuclease degradation and hybridise with  
 CC appropriate strength and fidelity to its target RNA/DNA. (I) are also  
 CC useful as research agents, diagnostic agents and as oligonucleotide  
 CC therapeutics. (I) may be used to treat atherosclerosis following  
 CC angioplasty to prevent reocclusion of the treated arteries. (I) may also  
 CC be used in conjunction with AZT to treat AIDS patients. (I) have been  
 CC used to modulate the expression of RAR gene, a cellular gene whose  
 CC tumour formation. (I) are also used to modulate the expression of protein  
 CC kinase C. (I) exhibit hybridisation properties of higher quality than  
 CC phosphorous modified oligonucleotide duplexes containing  
 CC methylphosphonates, phosphoramidates and phosphate triesters. The present  
 CC sequence represent an oligonucleotide used in the exemplification of the  
 CC present invention

XX  
 SQ Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;  
 Query Match 0.9%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 5e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAGATCAACG 149  
 Db 21 CGCAGAAGAAGAGCAACG 2

RESULT 327  
 AAAL4473/C  
 ID AAAL4473 standard; DNA; 21 BP.  
 XX AC AAAL4473;  
 XX DT 21-AUG-2000 (first entry)  
 XX DE Synthetic oligonucleotide #3.  
 XX KW Solid phase DNA synthesis; phosphoramidate nucleoside; acetonitrile;  
 KW water content; synthetic oligonucleotide; ss.  
 XX OS Synthetic.  
 XX FH Key Location/Qualifiers  
 FT modified\_base 1..21  
 FT /\*tag= a  
 FT /note= "Phosphorothioate linkages"  
 XX WO2000020431-A1.  
 XX PD 13-APR-2000.  
 XX PF 01-OCT-1999; 99WO-US022892.  
 XX PR 06-OCT-1998; 98US-00167165.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Scozzari A;  
 XX DR WPI; 2000-303729/26.  
 XX PT Coupling of a phosphoramidate nucleoside to a solid support-bound  
 XX nucleoside, useful for the synthesis of oligonucleotides for use in  
 XX diagnostic, research or therapeutic applications.  
 XX PS Example 8; Page 20; 30pp; English.

CC The invention relates to the use of acetonitrile having a water content  
CC of 30-1250 ppm in the linking of a phosphoramidite nucleoside to a solid  
CC support-bound nucleoside, and to the use of this process in the synthesis  
CC of oligonucleotides. The method is used for the coupling of a  
CC phosphoramidite nucleoside to a solid support-bound nucleoside,  
CC particularly in the large-scale synthesis of oligonucleotides using the  
CC phosphoramidite method. The oligonucleotides can be used in diagnostic,  
CC research and therapeutic applications, e.g., as probes, primers, linkers,  
CC adaptors and antisense oligonucleotides. The use of acetonitrile having a  
CC water content of 30-1250 ppm as compared to conventional methods using  
CC lower water content acetonitrile (at most 30 ppm) provides more  
CC economical synthesis without reduced efficiency of oligonucleotide  
CC synthesis. Sequences AA14471-AA14474 represent oligonucleotides  
CC synthesised using the process of the invention  
XX  
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAGAGATCAAAACG 149  
DB 21 CGCAAGAGAGAGCAAAACG 2

RESULT 328  
AAZ57151/c  
ID AAZ57151 standard; DNA; 21 BP.

XX AAZ57151;  
XX 03-APR-2000 (first entry)  
XX Phosphorothioate 21-mer oligonucleotide #3.  
XX Phosphorothioate; activator; oligonucleotide synthesis; phosphoramidite;  
XX phosphorylating reagent; ss.  
XX Synthetic.

Key Location/Qualifiers  
FT modified\_base 1..21  
FT /\*tag= a  
FT /\*note= "phosphorothioate linkages"

XX WO9962922-A1.  
XX 09-DEC-1999.  
XX 02-JUN-1999; 99WO-US012251.  
XX 02-JUN-1998; 98US-0087757P.  
XX 23-OCT-1998; 98US-00177953.  
XX (ISIS-) ISIS PHARM INC.  
XX Sanghvi Y, Manoharan M, Ravikumar VT;  
XX WPI; 2000-097311/08.

XX Preparation of nucleoside phosphoramidites and oligonucleotides.  
XX Example 20; Page 81; 153pp; English.

XX The present invention describes nucleoside phosphoramidites and  
XX oligonucleotides (ON's) prepared using pyridinium, imidazolium or  
XX benzimidazolium salts as activators. The preparation of a phosphorylated  
XX compound comprises reacting a compound having a hydroxyl group with a  
XX phosphorylating reagent in the presence of a pyridinium salt in a  
XX solvent. The phosphoramidites are useful as building blocks for synthesis  
XX of oligonucleotides, which are potentially useful in therapeutic and  
XX diagnostic applications. The activators can be produced in situ by mixing

CC pyridine and an acid, producing benefits in large scale synthesis.  
CC Compared with conventional activators, e.g. 1H-tetrazole, the pyridinium  
CC salts, and materials necessary for their generation in situ, are non-  
CC explosive and easier to store, and also cheaper and have higher  
CC solubility in organic solvents. Final purity of the phosphorylated  
CC material results from use of a less acidic reaction medium and a  
CC pyridinium salts are used. The present sequence represents a  
CC phosphorothioate 21-mer oligonucleotide, the synthesis of which is  
CC described in an example from the present invention  
XX

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAGAGATCAAAACG 149  
DB 21 CGCAAGAGAGAGCAAAACG 2

RESULT 329  
AA94541/c  
ID AAA94541 standard; DNA; 21 BP.

XX AAA94541;  
XX 10-JAN-2001 (first entry)  
XX Example biologically active oligonucleotide #3.  
XX Oligonucleotide; non-parenteral; multi-particulate; phosphorothioate; ss.

XX Synthetic.

Key Location/Qualifiers  
FT modified\_base 1..21  
FT /\*tag= a  
FT /\*mod\_base= OTHER  
FT /\*note= "phosphorothioate internucleotide linkage"

XX WO200050050-A1.

XX 31-AUG-2000.

XX 23-FEB-2000; 2000WO-US004662.

XX 23-FEB-1999; 99US-00256515.

XX (ISIS-) ISIS PHARM INC.

XX Hardee GE, Tillman LG, Mehta RC, Teng C;

XX WPI; 2000-572032/53.

XX Non-parenteral multi-particulate formulations comprise biologically  
XX active substances bound to carrier particles for delivery across mucosal  
XX membranes.

XX Claim 4; Page 8; 38pp; English.

XX The present invention relates to non-parenteral multi-particulate  
XX formulations for transporting agents (for example therapeutic) across  
XX mucosal membranes. The formulations comprise carrier particles bound with  
XX a biologically active agent and a penetration enhancer. The formulations  
XX associate with buccal, nasal, pulmonary, gastrointestinal and vaginal  
XX mucosal membranes to transport the biologically active agents to the  
XX lymph system, blood system or epithelial tissue of the subject. The  
XX formulation is administered orally which is preferred by patients. The  
XX present sequence is an example oligonucleotide that may be used in the  
XX formulation

XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149  
DB 21 CGCAGAGAGAGCAACG 2

RESULT 330  
AA94544/C  
ID AAA94544 standard; DNA; 21 BP.  
XX AC AAA94544;  
XX AC AAA94544;  
DT 10-JAN-2001 (first entry)  
XX DE Example biologically active oligonucleotide #6.  
XX KW Oligonucleotide; non-parenteral; multi-particulate; phosphorothioate;  
XX KW 2'-O-methoxyethyl; 5-methylcytidine; ss.  
XX OS Synthetic.

Key Location/Qualifiers  
FH modified\_base 1..21  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate internucleotide linkage"  
FT modified\_base 1..7  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-O-methoxyethyl nucleoside"  
FT modified\_base 2  
FT /\*tag= c  
FT /mod\_base= m5C  
FT modified\_base 8  
FT /\*tag= d  
FT /mod\_base= m5C  
FT modified\_base 10  
FT /\*tag= e  
FT /mod\_base= m5C  
FT modified\_base 13  
FT /\*tag= f  
FT /mod\_base= m5C  
FT modified\_base 15..20  
FT /\*tag= g  
FT /mod\_base= OTHER  
FT /note= "2'-O-methoxyethyl nucleoside"  
FT modified\_base 16  
FT /\*tag= h  
FT /mod\_base= m5C  
FT modified\_base 20  
FT /\*tag= i  
FT /mod\_base= m5C

XX WO2000050050-A1.  
XX 31-AUG-2000.  
XX 23-FEB-2000; 2000WO-US004662.  
XX 23-FEB-1999; 99US-00256515.  
XX (ISIS-) ISIS PHARM INC.  
XX Hardee GE, Tillman LG, Mehta RC, Teng C;  
XX WPI; 2000-572032/53.  
XX Non-parenteral multi-particulate formulations comprise biologically  
PT active substances bound to carrier particles for delivery across mucosal

PT membranes.  
XX Claim 4; Page 8; 38pp; English.  
XX The present invention relates to non-parenteral multi-particulate  
formulations for transporting agents (for example therapeutic) across  
mucosal membranes. The formulations comprise carrier particles bound with  
a biologically active agent and a penetration enhancer. The formulations  
associate with buccal, nasal, pulmonary, gastrointestinal and vaginal  
mucosal membranes to transport the biologically active agents to the  
lymph system, blood system or epithelial tissue of the subject. The  
formulation is administered orally which is preferred by patients. The  
present sequence is an example oligonucleotide that may be used in the  
formulation

XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;  
SQ Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAGATCAACG 149  
DB 21 CGCAGAGAGAGCAACG 2

RESULT 331  
AAF60903/C  
ID AAF60903 standard; DNA; 21 BP.  
XX AC AAF60903;  
XX AC AAF60903;  
DT 15-MAY-2001 (first entry)  
XX DE Anti-CMV oligonucleotide SEQ ID 12.  
XX Transport; membrane; cytostatic; virucide; vasotropic; dermatological;  
KW antipsoriatic; antiasthmatic; gene therapy; tumor cell; antisense;  
KW tumor therapy; drug; ss.  
XX Unidentified.  
XX DE19935302-A1.  
XX 08-FEB-2001.  
XX 28-JUL-1999; 99DE-01035302.  
XX 28-JUL-1999; 99DE-01035302.  
XX (AVET ) AVENTIS PHARMA DEUT GMBH.  
XX Uhlmann E, Greiner B, Unger E, Gothe G, Schwerdel M;  
XX WPI; 2001-203679/21.  
XX New substituted aryl conjugates of parent molecules, especially  
oligonucleotides, having improved transmembrane and intracellular  
transport properties, useful as medicaments or diagnostic agents.  
XX Disclosure; Page 6; 28pp; German.  
XX This invention describes a novel conjugate (I) which consists of (A) a  
molecule to be transported and (B) at least one aryl residue of formula -  
Ar-(X-C(Y)-R<sub>1</sub>)<sub>n</sub> (II). Ar = group containing at least one aromatic ring;  
X = O or N (sic); Y = O, S or NH-R<sub>2</sub> (sic); R<sub>1</sub> = optionally substituted  
1-23C alkyl (optionally containing double and/or triple bonds); R<sub>2</sub> =  
optionally substituted 1-18C alkyl (optionally containing double and/or  
triple bonds); n = integer of 1 or more. (A) is bonded to (B) directly or  
via a chemical group, provided that the chemical group is other than CH<sub>2</sub>  
-S if the bond is via a phosphodiester linkage of (A). The invention also  
describes (I) the preparation of a conjugate (I') of (A') a molecule to  
be transported and (B') at least one aryl residue (not restricted to



CC (II)), by preparing (A') containing a reactive function at the position  
CC at which (B') is to be bonded, preparing (B') and reacting (A') and (B');  
CC and (ii) the use of aryl groups (ii) optionally bonded via a chemical  
CC group for transporting (A) across biological membranes. The products of  
CC the invention have cytostatic, virucide, vasotropic, dermatological,  
CC antipsoriatic and antiasthmatic activity and can be used for gene  
CC therapy. Conjugation of (A) with (B) is useful for transporting (A)  
CC across biological membranes or into eukaryotic or prokaryotic cells  
CC (specifically bacterial, yeast or mammalian cells, including human cells,  
CC particularly tumor cells). Medicaments, diagnostic agents and test kits  
CC containing (ii) are also claimed. Typically (ii) are antisense  
CC oligonucleotide derivatives for tumor therapy; oligonucleotide drugs for  
CC treating viral infections or diseases associated with integrins or cell-  
CC cell interactions (e.g. restenosis, vitiligo, psoriasis or asthma); or  
CC labeled oligonucleotides for in vivo diagnostic use, e.g. by in situ  
CC hybridization. Conjugation with (B) markedly improves the cellular uptake  
CC of (A), e.g. in tumor cells. (B) include fluorescein derivative residues,  
CC in which case the conjugates (i) are fluorescently labeled, allowing  
CC microscopic monitoring of cellular uptake etc. The cellular uptake of (i)  
CC is superior to that obtained using other conjugated groups related to  
CC (ii), e.g. oligonucleotides conjugated with fluorescein diacetate (within  
CC the scope of (B)) have superior uptake to corresponding fluorescein  
CC conjugates  
XX  
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAAGAAGATCAACG 149  
||| ||||| ||||| |||||  
Db 21 CGCAAGAAGAAGCAACG 2

RESULT 332  
AAF97221  
ID AAF97221 standard; DNA; 21 BP.  
XX  
AC AAF97221;  
XX  
DT 06-JUN-2001 (first entry)  
XX  
DE Human gene single nucleotide polymorphism #1982.  
XX  
KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;  
KW polymorphism; vascular disease; coronary artery disease; forensics;  
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;  
KW pulmonary embolism; paternity test; ds.  
XX  
OS Homo sapiens.

XX  
FH Key Location/Qualifiers  
FT Variation replace(11,G)  
FT /\*tag= a  
FT /standard\_name= "single nucleotide polymorphism"

XX WO200118250-A2.  
XX  
XX 15-MAR-2001.  
XX  
XX 07-SEP-2000; 2000WO-US024503.  
XX  
XX 10-SEP-1999; 99US-0153357P.  
XX 26-JUL-2000; 2000US-0220947P.  
XX 16-AUG-2000; 2000US-0225724P.  
XX  
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
XX (MILL-) MILLENNIUM PHARM INC.

XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;  
XX WPI; 2001-226749/23.

XX Nucleic acids comprising single nucleotide polymorphisms, useful in  
PT applications such as forensics, paternity testing, medicine, genetic  
PT analysis and phenotype correlations to diseases such as diabetes and  
PT atherosclerosis.

XX Example; Page 183; 242pp; English.

XX The present invention provides a method of diagnosing a vascular disease  
CC in an individual, involving determining the sequence at various  
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4  
CC genes. The sequences at a number of polymorphic sites are also provided  
CC in the specification. In particular, the method can be used in the  
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart  
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and  
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also  
CC useful in forensics, paternity testing, genetic analysis and phenotype  
CC correlations to diseases. The present sequence is an example of one of  
CC the human gene SNPs shown in the specification

XX Sequence 21 BP; 7 A; 2 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1507 ATATTTCGACTAAGGAGAT 1526  
||||| ||||| ||||| |||||  
Db 2 ATATTTCGACTAAGGAGAT 21

RESULT 333  
AAF95371  
ID AAF95371 standard; DNA; 21 BP.

XX AAF95371;

XX 06-JUN-2001 (first entry)

XX Human gene single nucleotide polymorphism #132.

XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;  
KW polymorphism; vascular disease; coronary artery disease; forensics;  
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;  
KW pulmonary embolism; paternity test; ds.

XX Homo sapiens.

XX  
FH Key Location/Qualifiers  
FT Variation replace(11,T)  
FT /\*tag= a

FT /standard\_name= "single nucleotide polymorphism"

XX WO200118250-A2.

XX 15-MAR-2001.

XX 07-SEP-2000; 2000WO-US024503.

XX 10-SEP-1999; 99US-0153357P.

XX 26-JUL-2000; 2000US-0220947P.

XX 16-AUG-2000; 2000US-0225724P.

XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.

XX (MILL-) MILLENNIUM PHARM INC.

XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;  
XX WPI; 2001-226749/23.

XX Nucleic acids comprising single nucleotide polymorphisms, useful in  
PT applications such as forensics, paternity testing, medicine, genetic  
PT analysis and phenotype correlations to diseases such as diabetes and

```
PT atherosclerosis.
XX Example; Page 57; 242pp; English.
XX
CC The present invention provides a method of diagnosing a vascular disease
CC in an individual, involving determining the sequence at various
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC genes. The sequences at a number of polymorphic sites are also provided
CC in the specification. In particular, the method can be used in the
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC useful in forensics, paternity testing, genetic analysis and phenotype
CC correlations to diseases. The present sequence is an example of one of
CC the human gene SNPs shown in the specification
XX
SQ Sequence 21 BP; 6 A; 6 C; 8 G; 1 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 1267 ACTGAGGAGACGGCGCCAGG 1286
Db 2 ACAGAGAGACGGTGGCCCGG 21
RESULT 334
AAH46453/C
ID AAH46453 standard; DNA; 21 BP.
XX
AC AAH46453;
XX
DT 14-SEP-2001 (first entry)
DE Oligonucleotide #3.
XX
KW Phosphorothioate; anti-viral therapy; stereochemical pathway; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..21
FT /*tag= a
FT /mod_base= OTHER
FT /note= "All bases are phosphorothioate"
XX
XX US6242591-B1.
XX
PN 05-JUN-2001.
XX
PD 11-JAN-2000; 2000US-00481486.
XX
PF 15-OCT-1997; 97US-00950779.
XX
PR (ISIS-) ISIS PHARM INC.
XX
PA Cole DL, Ravikumar VT, Cheruvallath ZS;
PI WPI; 2001-407218/43.
XX
DR Preparing sulfurized 2' substituted phosphorothioate oligonucleotides
PT useful in biological research, comprises phosphorylating the 5'-hydroxyl
PT of a nucleic acid having a nucleoside with a 2' modification.
XX
XX Example 5; Col 6; 7pp; English.
XX
CC The present invention relates to a method for preparing phosphorothioate
CC oligonucleotides having at least one nucleoside with a 2' modification.
CC The method comprises phosphorylating the 5'-hydroxyl of a nucleic acid
CC group having at least one nucleoside with a 2' modification in an
CC acetonitrile. The present sequence was used to illustrate the method of
CC the present invention. The method is useful for synthesizing sulphurised
CC
```

```
CC 2' substituted phosphorothioate oligonucleotides, which may be used in
CC molecular biological research, in applications such as anti-viral
CC therapy, and for determining the stereochemical pathways of certain
CC enzymes which recognise nucleic acids
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAGAGAGCAACG 2
RESULT 335
AAC88207/C
ID AAC88207 standard; DNA; 21 BP.
XX
AC AAC88207;
XX
DT 01-MAR-2001 (first entry)
DE Modified phosphorothioate 21-mer SEQ ID NO: 3.
XX
KW Phosphorothioate oligomer; diagnosis; therapy; disease; AIDS;
KW atherosclerosis; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..21
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
XX
XX WO200068241-A1.
XX
PD 16-NOV-2000.
XX
PF 05-MAY-2000; 2000WO-US012447.
XX
PR 06-MAY-1999; 99US-00306278.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Ravikumar VT, Capaldi DC, Cole DT;
XX WPI; 2001-049743/06.
XX
DR Preparation of oligonucleotides useful in diagnostics using
PT phosphoramidite compositions.
XX
XX Example 7; Page 44; 75pp; English.
XX
CC The present invention provides novel compositions comprising
CC phosphoramidite compounds which can be used to synthesise modified
CC oligonucleotides. These modified oligonucleotides have phosphorothioate
CC backbones. They can be used to produce probes, primers, linkers, adaptors
CC and gene fragments and in disease diagnosis and therapy, for example in
CC the treatment of AIDS and atherosclerosis
XX
SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
Query Match 0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 130 CGGATGAAGAAGATCAACG 149
Db 21 CGCAAGAGAGAGCAACG 2
```

|     |   |  |
|-----|---|--|
| AC  | ABR97455;   |  |
| XX  |   |  |
| DT  | 16-APR-2002 (first entry)   |  |
| XX  |   |  |
| DE  | CMV targeted antisense peptide nucleic acid SEQ ID NO: 1.                 |  |
| XX  |   |  |
| KW  | Peptide nucleic acid; PNA; polyamide backbone; phosphoryl radical;        |  |
| KW  | cytostatic; virucide; dermatological; antiasthmatic; cancer; antisense;   |  |
| KW  | viral infection; vitiligo; pigmentation disorder; asthma; ss.             |  |
| XX  |   |  |
| OS  | Unidentified.   |  |
| OS  | Synthetic.  |  |
| XX  |   |  |
| PN  | WO200179249-A2.   |  |
| XX  |   |  |
| PD  | 25-OCT-2001.  |  |
| XX  |   |  |
| PF  | 07-APR-2001; 2001WO-EP004027.   |  |
| XX  |   |  |
| FR  | 18-APR-2000; 2000DE-01019136.   |  |
| XX  |   |  |
| PA  | (AVET ) AVENTIS PHARMA DEUT GMBH.   |  |
| XX  |   |  |
| PI  | Uhlmann E, Breipohl G, Will DW;   |  |
| XX  |   |  |
| XX  | WPI; 2002-089643/12.  |  |
| DR  |   |  |
| PFT | New peptide nucleic acid derivatives, useful e.g. for treating tumors and |  |
| PFT | diagnosis, have N-terminal phosphoryl residue for improving e.g.          |  |
| PFT | solubility in water.  |  |
| XX  |   |  |
| PS  | Disclosure; Page 74; 96pp; German.  |  |
| XX  |   |  |
| CC  | The present invention relates to peptide nucleic acid (PNA) derivatives.  |  |
| CC  | These can be used in the treatment of cancer, viral infections, vitiligo  |  |
| CC  | or other pigmentation disorders, and asthma. The present sequence is an   |  |
| CC  | oligonucleotide fragment of a PNA described in the exemplification of the |  |
| XX  | invention   |  |
| XX  |   |  |
| SQ  | Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;                        |  |
|     |   |  |
|     | Query Match 0.9%; Score 15.2; DB 1; Length 21;                            |  |
|     | Best Local Similarity 85.0%; Pred. NO. 5e+02; 3; Indels 0; Gaps 0;        |  |
|     | Matches 17; Conservative 0; Mismatches 0; 3; Indels 0; Gaps 0;            |  |
| QY  | 130 CGGATGAAGAGATCAACG 149  |  |
|     |   |  |
|     | 21 CGCAAGAAGAAGCAACG 2  |  |
| Db  |   |  |
|     |   |  |
|     | RESULT 338  |  |
|     | ABK99295/c  |  |
| ID  | ABK99295 standard; RNA; 21 BP.  |  |
| XX  |   |  |
| AC  | ABK99295;   |  |
| XX  |   |  |
| DT  | 21-OCT-2002 (first entry)   |  |
| XX  |   |  |
| DE  | Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #25.        |  |
| XX  |   |  |
| KW  | Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.               |  |
| OS  | Synthetic.  |  |
| XX  |   |  |
| PN  | US2002064771-A1.  |  |
| XX  |   |  |
| PD  | 30-MAY-2002.  |  |
| XX  |   |  |
| PF  | 06-APR-2001; 2001US-00828034.   |  |
| XX  |   |  |
| PR  | 07-APR-2000; 2000US-0195852P.   |  |
| XX  |   |  |
| PA  | (ZHON/) ZHONG W.  |  |



```
PA (COLE-) COLEY PHARM GROUP LTD.
PI Schetter C, Vollmer J;
XX
XX
DR WPI; 2002-723213/78.
XX
XX New compositions comprising CpG-like immunostimulatory nucleic acids,
PT useful for treating or preventing infectious diseases, cancer, allergy,
PT asthma, immunodeficiency, anemia, thrombocytopenia or neutropenia.
XX
XX
PS Example 1; Page 89; 148pp; English.
XX
XX The present sequence is that of antisense oligonucleotide (ODN) 5114
CC (Formiversen 1312 ISIS), which was used in an example of the invention
CC in which methylated CpG-like oligonucleotides were compared with
CC unmethylated ODNs for their immunostimulant activity. ODN 5114 exhibited
CC significant stimulatory capability on human B cells, and its
CC corresponding methylated form, ODN 5154 (see ABV73950) also induced
CC stimulation, although to a lesser extent. Methylated CpG, CpI and ZpI
CC ODNs of the invention (see ABV73935-37) are useful for inducing an immune
CC response in a subject, including humans, for the treatment or prevention
CC of an infectious disease, cancer, allergy or asthma, for enhancing or
CC stimulating bone marrow proliferation in an immunodeficiency,
CC particularly in a subject undergoing chemotherapy, for enhancing
CC erythropoiesis in anaemia, for enhancing thrombopoiesis in
CC thrombocytopenia, for enhancing neutrophil proliferation in
CC neutropaenia, and for inducing cytokine (e.g. interleukin (IL)-1 beta, IL
CC -2, IL-6, IL-12, IL-18, TNF, interferon-alpha or interferon-gamma)
CC production (all claimed)
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 5e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 130 CGGATGAAGAGATCAACG 149
XX ||| ||||| ||||| |||||
XX Db 21 CGCAAGAGAGAGCAACG 2
XX
XX RESULT 341
XX ABV73950/c
XX ID ABV73950 standard; DNA; 21 BP.
XX
XX AC ABV73950;
XX
XX DT 13-JAN-2003 (first entry)
XX
XX DE Methylated antisense oligonucleotide 5154.
XX
XX KW Immunostimulant; infection; allergy; asthma; cancer; anaemia;
XX thrombocytopenia; neutropaenia; antimicrobial; antiasthmatic;
XX cytostatic; antianaemic; antiallergic; haemostatic; antisense;
XX phosphorothioate; ss.
XX
XX OS Synthetic.
XX
XX PH Key Location/Qualifiers
XX modified_base 1..21
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate linkage"
XX modified_base 2
XX FT /tag= b
XX FT /mod_base= m5c
XX modified_base 8
XX FT /tag= c
XX FT /mod_base= m5c
XX modified_base 10
XX FT /tag= d
XX FT /mod_base= m5c
XX modified_base 13
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```
FT FT /*tag= e
FT modified_base 16 /mod_base= m5c
FT FT /*tag= f
FT modified_base 20 /mod_base= m5c
FT FT /*tag= g
FT modified_base 20 /mod_base= m5c
XX
XX WO200269369-A2.
XX
XX PD 06-SEP-2002.
XX
XX PF 10-DEC-2001; 2001WO-IB002888.
XX
XX PR 08-DEC-2000; 2000US-0254341P.
XX
XX PA (COLE-) COLEY PHARM GROUP LTD.
XX
XX PI Schetter C, Vollmer J;
XX WPI; 2002-723213/78.
XX
XX PT New compositions comprising CpG-like immunostimulatory nucleic acids,
XX useful for treating or preventing infectious diseases, cancer, allergy,
XX asthma, immunodeficiency, anemia, thrombocytopenia or neutropenia.
XX
XX PS Example 1; Page 89; 148pp; English.
XX
XX CC The present sequence is that of methylated oligonucleotide (ODN) 5154, a
XX methylated version of antisense ODN 5114 (see ABV73946), which was used
XX in an example of the invention in which methylated CpG-like ODNs were
XX compared with unmethylated ODNs for their immunostimulant activity. ODN
XX 5114 exhibited significant stimulatory capability on human B cells. ODN
XX 5154 also induced stimulation, although to a lesser extent. Methylated
XX CpG, CpI and ZpI ODNs of the invention (see ABV73935-37) are useful for
XX inducing an immune response in a subject, including humans, for the
XX treatment or prevention of an infectious disease, cancer, allergy or
XX asthma, for enhancing or stimulating bone marrow proliferation in an
XX immunodeficiency, particularly in a subject undergoing chemotherapy, for
XX enhancing erythropoiesis in anaemia, for enhancing thrombopoiesis in
XX thrombocytopenia, for enhancing neutrophil proliferation in
XX neutropaenia, and for inducing cytokine (e.g. interleukin (IL)-1 beta, IL
XX -2, IL-6, IL-12, IL-18, TNF, interferon-alpha or interferon-gamma)
XX production (all claimed)
XX
XX SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 5e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 130 CGGATGAAGAGATCAACG 149
XX ||| ||||| ||||| |||||
XX Db 21 CGCAAGAGAGAGCAACG 2
XX
XX RESULT 342
XX ABL90981/c
XX ID ABL90981 standard; DNA; 21 BP.
XX
XX AC ABL90981;
XX
XX DT 27-MAY-2002 (first entry)
XX
XX DE Cytomegalovirus (CMV) treatment oligonucleotide.
XX
XX KW PKC antisense oligonucleotide; protein kinase C; PKC; PKC-alpha;
XX PKC-beta type I; PKC-beta type II; PKC-gamma; PKC-delta; PKC-epsilon;
XX PKC-zeta; PKC-eta; PKC expression modulation; ss;
XX hyperproliferative condition; tumour; glioblastoma; bladder cancer;
XX breast cancer; colon cancer; lung cancer; inflammatory condition;
XX psoriasis; phosphorothioate backbone; hepatitis C virus; HCV; ICAM-1;
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XX cytomagalovirus; CMV.
XX Unidentified.
XX US6339066-B1.
XX 15-JAN-2002.
XX 31-MAR-1997; 97US-00829637.
XX 11-JAN-1990; 90US-004633358.
XX 13-AUG-1990; 90US-00566977.
XX 11-JAN-1991; 91KO-US000243.
XX 13-OCT-1991; 91US-00777760.
XX 16-OCT-1991; 91US-00777707.
XX 16-MAR-1992; 92US-00852852.
XX 05-MAY-1993; 93US-00059023.
XX 09-JUL-1993; 93US-00089996.
XX 29-AUG-1994; 94US-00297703.
XX 07-JUN-1995; 95US-00481066.
XX (ISIS-) ISIS PHARM INC.
XX Bennett CF, Dean NM, Cook PD, Hoke G;
XX WPI; 2002-215022/27.
XX New antisense oligonucleotide having nucleoside units which specifically
XX binds mRNA encoding human protein kinase C isoform, useful for treating
XX hyperproliferative and inflammatory diseases e.g. psoriasis, tumor and
XX cancer.
XX Example 19; Col 25; 77pp; English.
XX The invention comprises antisense oligonucleotides designed to bind mRNA
XX encoding a human protein kinase C (PKC) isoform (i.e. PKC-alpha, PKC-beta
XX type I, PKC-beta type II, PKC-gamma, PKC-delta, PKC-epsilon, PKC-zeta
XX and PKC-eta). The antisense oligonucleotides of the invention are useful
XX for modulating the expression of the PKC isoforms. The antisense
XX oligonucleotides are useful for treating hyperproliferative conditions
XX (e.g. tumour, glioblastoma, bladder cancer, breast cancer, colon cancer
XX and lung cancer), and inflammatory conditions (e.g. psoriasis). The
XX antisense oligonucleotides of the invention are also useful for detection
XX and diagnosis of PKC expression. The present sequence represents an
XX antisense oligonucleotide described in the invention. NOTE: The present
XX sequence contains a phosphorothioate backbone
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 5e+02; 3; Indels 0; Gaps 0;
XX Matches 17; Conservative 0; Mismatches 0;
XX
XX QY 130 CGGATGAAGAGATCAACG 149
XX 21 CGCAAGAGAGAGACAAACG 2
XX
XX RESULT 343
XX ABK69603/c
XX ID ABK69603 standard; DNA; 21 BP.
XX AC ABK69603;
XX 15-JUL-2002 (first entry)
XX
XX Novel G protein-coupled receptor, PCR primer #3.
XX
XX G protein coupled receptor; nontropic; neuroprotective; cytostatic;
XX transgenic; central nervous system disorder; endocrine disorder;
XX metabolic disease; cancer; gene therapy; colocalinoma; primer; ss.
XX
XX Homo sapiens.
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 5e+02; 3; Indels 0; Gaps 0;
XX Matches 17; Conservative 0; Mismatches 0;
XX
XX QY 396 TGAGGTGCAGTCTCCAGTGA 415
XX 21 TGCCGTGAAGTCTCCAGTGA 2
XX
XX RESULT 344
XX ABK69614/c
XX ID ABK69614 standard; DNA; 21 BP.
XX AC ABK69614;
XX 15-JUL-2002 (first entry)
XX
XX Novel G protein-coupled receptor, PCR primer #10.
XX
XX G protein coupled receptor; nontropic; neuroprotective; cytostatic;
XX transgenic; central nervous system disorder; endocrine disorder;
XX metabolic disease; cancer; gene therapy; colocalinoma; primer; ss.
XX
XX Synthetic.
XX
XX WO200231145-A1.
XX 18-APR-2002.
XX
XX 12-OCT-2001; 2001WO-JF008977.
XX
XX 13-OCT-2000; 2000JP-00313533.
XX
XX 16-NOV-2000; 2000JP-00350057.
XX
XX (TAKE ) TAKEDA CHEM IND LTD.
XX
XX Sato S, Shintani Y, Miyajima N, Yoshimura K;
XX WPI; 2002-362679/39.
XX
XX New human colocalinoma-originated G protein-coupled receptor protein for
XX developing drugs e.g. with transgenic animals to treat diseases of the
XX central nervous system, endocrine diseases and cancer.
XX
XX Example 2; Page 168; 210pp; Japanese.
XX
XX The invention relates to a novel colocalinoma-originated G protein-
XX coupled receptor protein. The protein and encoded DNAs are for diagnosis
XX and developing drugs e.g. with transgenic animals to treat diseases of
XX the central nervous system, endocrine and metabolic diseases, and cancer,
XX including by gene therapy. ABK69599-ABK69646 represent G protein-coupled
XX receptor protein coding sequences and related primers of the invention
XX
XX Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 5e+02; 3; Indels 0; Gaps 0;
XX Matches 17; Conservative 0; Mismatches 0;
XX
XX QY 396 TGAGGTGCAGTCTCCAGTGA 415
XX 21 TGCCGTGAAGTCTCCAGTGA 2
XX
XX RESULT 344
XX ABK69614/c
XX ID ABK69614 standard; DNA; 21 BP.
XX AC ABK69614;
XX 15-JUL-2002 (first entry)
XX
XX Novel G protein-coupled receptor, PCR primer #10.
XX
XX G protein coupled receptor; nontropic; neuroprotective; cytostatic;
XX transgenic; central nervous system disorder; endocrine disorder;
XX metabolic disease; cancer; gene therapy; colocalinoma; primer; ss.
XX
XX Synthetic.
XX
XX WO200231145-A1.
XX 18-APR-2002.
XX
XX 12-OCT-2001; 2001WO-JF008977.
XX
XX 13-OCT-2000; 2000JP-00313533.
XX
XX 16-NOV-2000; 2000JP-00350057.
XX
XX (TAKE ) TAKEDA CHEM IND LTD.
XX
XX Sato S, Shintani Y, Miyajima N, Yoshimura K;
XX WPI; 2002-362679/39.
XX
XX New human colocalinoma-originated G protein-coupled receptor protein for
XX developing drugs e.g. with transgenic animals to treat diseases of the
```



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AC AAD39344;
XX
XX
DT 04-OCT-2002 (first entry)
XX
XX
DE Human Von Willebrand factor-cleaving protease cloning PCR primer, 6278.
XX
XX
KW Human, Von Willebrand factor-cleaving protease; vWF-cp; therapy; enzyme;
XX transgenic animal; immunisation; thromboembolic disease; preclampsia;
XX thrombotic thrombocytopenic purpura; TTP; Henoch-Schönlein purpura;
XX thrombosis; neonatal thrombocytopenia; haemolytic-uraemic syndrome;
XX transgenic; anticoagulant; RT-PCR; primer; ss.
XX
OS Homo sapiens.
XX
XX WO200242441-A2.
XX
XX 30-MAY-2002.
XX
XX 20-NOV-2001; 2001WO-EP013391.
XX
XX 22-NOV-2000; 2000US-00721254.
XX
XX 12-APR-2001; 2001US-00833328.
XX
XX (BAXT ) BAXTER AG.
XX
XX Laemmle B, Gerritsen HE, Furlan M, Turecek P, Schwarz H;
XX Scheiflinger F, Antoine G, Kerschbaumer R, Tagliavacca L;
XX Zimmermann K, Voelkel D;
XX
XX WPI; 2002-479950/51.
XX
XX Novel isolated or substantially purified Von Willebrand factor-cleaving
XX protease, useful for producing preparation for therapy of thrombosis and
XX thromboembolic disease such as thrombotic thrombocytic purpura.
XX
XX Example 3; Page 34; 93pp; English.
XX
XX The invention relates to an isolated or substantially pure Von Willebrand
XX factor-cleaving protease (vWF-cp) polypeptide. vWF-cp is useful for
XX purifying vWF which involves providing vWF-cp as a ligand, contacting a
XX solution comprising vWF with the polypeptide ligand under conditions
XX where vWF is bound to the ligand and recovering from the ligand purified
XX vWF. vWF-cp is useful for producing anti-vWF cp polypeptide antibodies
XX which involves immunising an animal with vWF-cp and isolating the anti-
XX vWF cp polypeptide antibodies from the animal. vWF-cp is useful for
XX producing a preparation of prophylaxis and therapy of thrombosis and
XX thromboembolic disease such as thrombotic thrombocytic purpura (TTP),
XX Henoch-Schönlein purpura, preclampsia, neonatal thrombocytopenia or
XX haemolytic-uraemic syndrome. vWF-cp can also be used for processing
XX plasmatic or recombinantly produced vWF. The invention is useful for
XX construction expression systems and generating transgenic animals which
XX express the polypeptide in vivo. The present sequence is human vWF-cp
XX gene cloning RT-PCR primer
XX
XX Sequence 21 BP; 2 A; 8 C; 7 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 5e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 509 GCTACCTGGAGAGCTGACC 528
XX ||||| ||||| ||||| |||||
XX Db 2 GCTCCTGGTGGAGCTGACC 21
XX
XX RESULT 348
XX ABT06151
XX ID ABT06151 standard; DNA; 21 BP.
XX
XX AC ABT06151;
XX
XX 28-OCT-2002 (first entry)
XX
XX ss; oligomeric compound; phosphite; phosphodiester; phosphorothioate;
XX phosphorodithioate; diagnostic; therapeutic; gene therapy.
XX

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```

DE Human light chain lambda gene related oligo SEQ ID No 165.
XX
XX Single Primer Amplification; nested oligonucleotide extension reaction;
XX hairpin; SPA; library; ds.
XX
XX Homo sapiens.
XX
XX WO200248401-A2.
XX
XX 20-JUN-2002.
XX
XX 10-DEC-2001; 2001WO-US047727.
XX
XX 11-DEC-2000; 2000US-0254669P.
XX
XX 19-SEP-2001; 2001US-0323400P.
XX
XX (ALEX-) ALEXION PHARM INC.
XX
XX Bowdish KS, Barbas-Frederickson S, Lin Y, McWhirter J, Maruyama T;
XX WPI; 2002-500537/53.
XX
XX Amplifying nucleic acid by synthesizing template nucleic acid containing
XX a predetermined sequence and hairpin structure and using the template for
XX target amplification by Single Primer Amplification.
XX
XX Example 6; Page 35; 54pp; English.
XX
XX The invention relates to a method for amplifying a nucleic acid using
XX Single Primer Amplification (SPA). The method comprises synthesising a
XX template nucleic acid containing a predetermined sequence and hairpin
XX structure with the nested oligonucleotide extension reaction. The method
XX is useful for amplifying a nucleic acid, preferably for amplifying a
XX family of related nucleic acid sequences to build a complex library of
XX polypeptides encoded by the sequences. The engineered nucleic acid strand
XX is useful for amplifying a nucleic acid strand by providing a nucleic
XX acid with a predetermined sequence engineered onto its first end, a
XX sequence complementary to the predetermined sequence and a hairpin
XX structure between them and contacting the engineered nucleic acid strand
XX with a primer containing at least a portion of the predetermined
XX sequence. This process is done in the presence of a polymerase and
XX nucleotides under conditions suitable for polymerisation to produce a
XX complementary nucleic acid strand. The method of the invention is useful
XX for producing large amounts of a target nucleic acid sequence and for
XX amplifying simultaneously more than one different target nucleic acid
XX sequence located on the same or different nucleic acid molecules. This
XX polynucleotide sequence represents an oligonucleotide relating to the
XX invention
XX
XX Sequence 21 BP; 5 A; 4 C; 9 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 5e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 634 CTGGGAGAGGGTACCTATGC 653
XX ||||| ||||| ||||| |||||
XX Db 1 CTGGGAGAGGGTACCTATGC 20
XX
XX RESULT 349
XX ABX10631/C
XX ID ABX10631 standard; DNA; 21 BP.
XX
XX AC ABX10631;
XX
XX 15-APR-2003 (first entry)
XX
XX Synthetic phosphorothioate oligonucleotide #3.
XX
XX ss; oligomeric compound; phosphite; phosphodiester; phosphorothioate;
XX phosphorodithioate; diagnostic; therapeutic; gene therapy.
XX

```





CC The present invention describes a delayed release oral formulation (A),  
 CC giving enhanced gastrointestinal (GI) absorption of a drug (I). (A)  
 CC comprises a first set of particles containing (I) and a penetration  
 CC enhancer (II) and a second set of particles containing (II) in a delayed  
 CC release coating or matrix (III). (A) is used for enhancing the absorption  
 CC of (I) in mammals, especially humans. Typical disorders to be treated  
 CC include ulcerative colitis, rheumatoid arthritis, Crohn's disease,  
 CC inflammatory bowel disease and abnormal cellular proliferation. When the  
 CC particles release (I) and (II) at a first location in the GI tract  
 CC (generally the intestines), (II) is rapidly absorbed (during a first  
 CC release pulse) and is often present in insufficient amount to promote  
 CC absorption of the entire dose of (I). This problem is solved by providing  
 CC further (II) in delayed release form in the particles, so that absorption  
 CC of (I) is completed in a second pulse. The present sequence represents an  
 CC exemplary oligonucleotide from the present invention which inhibits HCMV  
 XX

SQ Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 5e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 130 CGGATGAAGAAGATCAACG 149  
 |||||  
 Db 21 CGCAGAAGAAGCAACG 2

RESULT 352  
 ACC68813/c  
 ID ACC68813 standard; DNA; 21 BP.  
 AC ACC68813;  
 AC ACC68813;  
 DT 02-JUL-2003 (first entry)  
 XX Human TGR23-2 PCR primer SEQ ID NO:9.  
 DE  
 XX G protein-coupled receptor; GPCR; TGR23-1; TGR23; anorectic;  
 KW cytosstatic; obesity disorder; cancer; appetite stimulation; PCR primer;  
 XX ss.  
 KW Homo sapiens.  
 OS Synthetic.  
 OS  
 XX WO2003025179-A1.  
 XX 27-MAR-2003.  
 XX 13-SEP-2002; 2002WO-JP009446.  
 XX 14-SEP-2001; 2001JP-00279232.  
 PR 12-OCT-2001; 2001JP-00315148.  
 PR 10-APR-2002; 2002JP-00108621.  
 PR 10-JUN-2002; 2002JP-00169232.  
 XX (TAKE ) TAKEDA CHEM IND LTD.  
 PA  
 XX Mori M, Hayashi K, Miya H, Sato S, Kitada C, Matsumoto H;  
 PI Nagi T, Shimomura Y;  
 PI  
 XX WPI; 2003-313356/30.

PT Polypeptides binding to G-protein coupled receptors TGR23-1 and TGR23-2  
 PT for prevention and treatment of obesity, cancer and appetite disorders.  
 XX  
 PS Example 2; Page 245; 338pp; Japanese.  
 XX  
 CC The present invention describes polypeptides (I) and their amides, esters  
 CC and salts which bind to the human G protein-coupled receptor (GPCR)  
 CC proteins TGR23-1 and TGR23-2. TGR23 proteins have anorectic and  
 CC cytosstatic activities. (I) can be used in the treatment, prevention and  
 CC diagnosis of obesity disorders and cancer (including cancer of the  
 CC intestines, colon, breast, lung (including non-small cell lung cancer),  
 CC prostate, oesophagus, stomach, liver, pancreas, kidney, womb, ovary,  
 CC testis, bladder and brain, and blood cancers). (I) can also be used in  
 CC appetite stimulation. ACC68807 to ACC68890 and ABP97241 to ABP97280  
 CC represent sequences used in the exemplification of the present invention  
 XX

CC prostate, oesophagus, stomach, liver, pancreas, kidney, womb, ovary,  
 CC testis, bladder and brain, and blood cancers). (I) can also be used in  
 CC appetite stimulation. ACC68807 to ACC68890 and ABP97241 to ABP97280  
 CC represent sequences used in the exemplification of the present invention  
 XX  
 SQ Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 5e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 396 TGAGGTGCAGTCTCCAGTGA 415  
 |||||  
 Db 21 TGCCGTGAAGTCTCCAGTGA 2

RESULT 353  
 ACC6881/c  
 ID ACC6881 standard; DNA; 21 BP.  
 XX  
 AC ACC6881;  
 AC ACC6881;  
 DT 02-JUL-2003 (first entry)  
 XX Human GPCR TGR23-2 PCR primer SEQ ID NO:115.  
 DE  
 XX G protein-coupled receptor; GPCR; TGR23-2; TGR23-1; TGR23; anorectic;  
 KW cytosstatic; obesity disorder; cancer; appetite stimulation; PCR primer;  
 XX ss.  
 KW Homo sapiens.  
 OS Synthetic.  
 OS  
 XX WO2003025179-A1.  
 XX 27-MAR-2003.  
 XX 13-SEP-2002; 2002WO-JP009446.  
 XX 14-SEP-2001; 2001JP-00279232.  
 PR 12-OCT-2001; 2001JP-00315148.  
 PR 10-APR-2002; 2002JP-00108621.  
 PR 10-JUN-2002; 2002JP-00169232.  
 XX (TAKE ) TAKEDA CHEM IND LTD.  
 PA  
 XX Mori M, Hayashi K, Miya H, Sato S, Kitada C, Matsumoto H;  
 PI Nagi T, Shimomura Y;  
 PI  
 XX WPI; 2003-313356/30.

PT Polypeptides binding to G-protein coupled receptors TGR23-1 and TGR23-2  
 PT for prevention and treatment of obesity, cancer and appetite disorders.  
 XX  
 PS Example 39; Page 327; 338pp; Japanese.

XX The present invention describes polypeptides (I) and their amides, esters  
 CC and salts which bind to the human G protein-coupled receptor (GPCR)  
 CC proteins TGR23-1 and TGR23-2. TGR23 proteins have anorectic and  
 CC cytosstatic activities. (I) can be used in the treatment, prevention and  
 CC diagnosis of obesity disorders and cancer (including cancer of the  
 CC intestines, colon, breast, lung (including non-small cell lung cancer),  
 CC prostate, oesophagus, stomach, liver, pancreas, kidney, womb, ovary,  
 CC testis, bladder and brain, and blood cancers). (I) can also be used in  
 CC appetite stimulation. ACC68807 to ACC68890 and ABP97241 to ABP97280  
 CC represent sequences used in the exemplification of the present invention  
 XX

SQ Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.2; DB 1; Length 21;  
 Best Local Similarity 85.0%; Pred. No. 5e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 396 TGAGGTGCAGTCTCCAGTGA 415  
Db 21 TGCCGGAAGTCTCCAGTGA 2

RESULT 354  
ACC49160/c  
XX ACC49160 standard; DNA; 21 BP.  
AC ACC49160;  
XX  
XX  
XX 19-JUN-2003 (first entry)  
XX  
DE HCMV inhibitory antisense oligonucleotide SEQ ID NO:3.  
XX  
XX Inhibition: antisense oligonucleotide; phosphorothioate; bioadhesive;  
KW enhanced mucosal drug absorption; antiulcer; antiinflammatory; cancer;  
KW antihematemetic; antiarthritic; cytostatic; ulcerative colitis; tumour;  
KW rheumatoid arthritis; Crohn's disease; inflammatory bowel disease;  
KW cellular proliferation; ss.  
XX  
XX Synthetic.  
XX  
XX  
XX Key Location/Qualifiers  
FT modified\_base 1..21  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate linkages"  
XX  
PN WO2003018134-A2.  
XX  
XX 06-MAR-2003.  
XX  
XX 22-AUG-2002; 2002WO-US026925.  
XX  
XX 22-AUG-2001; 2001US-00935316.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Teng C, Weinbach SP, Tillman LG, Geary RS, Hardee GE;  
XX WPI; 2003-342432/32.  
XX  
XX Oral pharmaceutical formulation for delivering bioactive macromolecule  
PT to mucosal surface, contains drug, bioadhesive compound, and penetration  
PT enhancer.  
XX  
XX Disclosure; Page 28; 62pp; English.  
XX  
XX The present invention describes an oral pharmaceutical formulation (I)  
CC for delivering a bioactive macromolecule to a mucosal surface. (I)  
CC comprises a first population of carrier particles comprising drug and a  
CC bioadhesive compound; and a second population of carrier particles  
CC comprising a penetration enhancer. Also described is a method for  
CC enhancing the mucosal absorption of the bioactive macromolecule in a  
CC mammal (preferably a human) by mucosally administering (I). (I) has  
CC antiulcer, antiinflammatory, antihematemetic, antiarthritic and cytostatic  
CC activities. (I) can be used for delivering a bioactive macromolecule to  
CC a mucosal surface. It is used for the oral delivery of a drug to an  
CC animal encompassing a human as well as other mammals, reptiles, fish,  
CC amphibians and birds. It is used to deliver drugs including peptides,  
CC proteins, monoclonal antibodies their fragments, nucleic acids (DNA and  
CC RNA), oligonucleotides, antisense oligonucleotides, and small molecules.  
CC It can be used to examine the function of various proteins and genes in  
CC an animal, including those that are essential to animal development. It  
CC can be used for the treatment of animals that are known or suspected to  
CC suffer from any disease treatable with the inventive composition, e.g.  
CC ulcerative colitis, rheumatoid arthritis, Crohn's disease, inflammatory  
CC bowel disease, or undue cellular proliferation (cancers and tumours). The  
CC present sequence represents an exemplary oligonucleotide from the present  
CC invention, which can be used to inhibit HCMV

Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02; Mismatches 0; Gaps 0;  
Matches 17; Conservative 0; Indels 3; Indels 0; Gaps 0;

QY 130 CGGATCAAGAGATCAACG 149  
Db 21 CGCAAGAGAGAGCAACG 2

RESULT 355  
ABX10710  
ID ABX10710 standard; DNA; 21 BP.  
XX  
XX ABX10710;  
AC  
XX 15-APR-2003 (first entry)  
DT  
XX Human glycoprotein hormone Zlut1 PCR primer #6.  
DE  
XX Human; ss; PCR; Zlut1; glycoprotein hormone; hyperthyroidism;  
KW antithyroid; chromosome 14q23.3; primer.  
XX  
XX Homo sapiens.  
OS  
XX US2002160953-A1.  
PN  
XX 31-OCT-2002.  
PD  
XX 30-AUG-2001; 2001US-00943388.  
PF  
XX 25-APR-2000; 2000US-0199498P.  
FR  
XX 20-APR-2001; 2001US-00839706.  
FR  
XX (HOLL/) HOLLOWAY J L.  
PA (WEBS/) WEBSTER P J.  
PA (THAY/) THAYER E C.  
XX  
XX Holloway JL, Webster PJ, Thayer EC;  
PI WPI; 2003-209228/20.  
XX  
XX New Zlut1 polypeptides and polynucleotides, useful for manufacturing a  
PT medicament for treating hyperthyroidism.  
PT  
XX Example 4; Page 45; 51pp; English.  
XX  
XX The invention relates to an isolated glycoprotein hormone Zlut1 sequence,  
CC the mature protein or antigenic peptides derived from Zlut1. Also  
CC included are an isolated polynucleotide encoding Zlut1, an isolated  
CC antibody that specifically binds to Zlut1, treating hyperthyroidism in  
CC female mammals by administering Zlut1 and a pharmaceutical composition  
CC comprising Zlut1. Zlut1 is useful for manufacturing a medicament for  
CC treating hyperthyroidism. Anti-Zlut1 antibodies can be used to detect  
CC Zlut1 in tissue sections from a biopsy specimen or to screen biological  
CC samples in vitro for the presence of Zlut1. Zlut1 is useful for treating  
CC women with hyperthyroidism. The nucleic acid molecules are useful for  
CC detecting the expression of a Zlut1 gene in a biological sample. The  
CC present sequence is a human PCR primer used to isolate mouse Zlut1 DNA to  
CC use as a probe for detecting Zlut1 genomic DNA

Sequence 21 BP; 3 A; 6 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02; Mismatches 0; Gaps 0;  
Matches 17; Conservative 0; Indels 3; Indels 0; Gaps 0;

QY 163 ACATCCGAGGTGCCGAGG 182  
Db 2 ACATCCGAGGTGCCGAGTGG 21

RESULT 356





ID ACA61365 standard; RNA; 21 BP.  
XX ACA61365;  
AC  
XX  
DT 11-AUG-2003 (first entry)  
XX Antiviral screening immunoassay oligonucleotide #2.  
DE  
XX Antiviral screening; immunoassay; ss; nuclease inhibitor; gene therapy;  
KW AIDS; bacterial infection; viral infection; protozoan infection;  
KW abnormal cell proliferation; tumour formation; atherosclerosis.  
XX  
XX Unidentified.  
OS Synthetic.  
XX  
XX  
PH Key Location/Qualifiers  
FT modified\_base 1..7  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = 2'-O-methyl nucleotides"  
FT modified\_base 15..21  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "OTHER = 2'-O-methyl nucleotides"  
XX  
XX US2003004325-A1.  
XX  
XX 02-JAN-2003.  
XX  
XX 28-NOV-2001; 2001US-00996263.  
XX  
XX 11-JAN-1990; 90US-00463358.  
XX 13-AUG-1990; 90US-00566977.  
XX 11-JAN-1991; 91WO-US000243.  
XX 12-AUG-1991; 91WO-US005720.  
XX 24-DEC-1991; 91US-00814961.  
XX 05-MAR-1992; 92US-00835932.  
XX 01-JUL-1992; 92US-00854634.  
XX 23-DEC-1992; 92WO-US011339.  
XX 21-JUN-1994; 94US-00244993.  
XX 06-JUN-1995; 95US-00471973.  
XX 17-AUG-1998; 98US-00135202.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Cook PD, Kawasaki AM;  
PI WPI; 2003-438873/41.  
XX  
XX New nuclease resistant compounds, useful as therapeutics, diagnostic  
PT agents, or research reagents, or for treating an organism with a disease  
PT associated with the undesired production of a protein, e.g. bacterial  
PT infections or AIDS.  
XX  
XX Example 34; Page 31; 50pp; English.  
XX  
XX The invention relates to a nuclease resistant compound that hybridises  
CC with RNA or DNA, comprising covalently-bound nucleosides that  
CC individually include a ribose of deoxyribose sugar portion and a base  
CC portion. The nuclease resistant compounds are useful as therapeutics,  
CC diagnostic agents, or research reagents. The compounds are also useful  
CC for modulating the activity of an RNA or DNA molecule, or for treating an  
CC organism with a disease associated with the undesired production of a  
CC protein, e.g. bacterial, viral or protozoan infections, AIDS, abnormal  
CC cell proliferation and tumour formation, or atherosclerosis. The present  
CC sequence represents the antiviral screening immunoassay oligonucleotide  
CC #2  
XX  
XX Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;  
SQ  
Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAGAGATCAACG 149  
DB 21 CGCAGAGAGAGCAACG 2  
RESULT 361  
ADC24666/C  
ID ADC24666 standard; DNA; 21 BP.  
XX  
XX ADC24666;  
AC  
XX 18-DEC-2003 (first entry)  
DT  
XX Antisense DNA #14 that can be conjugated to the carriers of invention.  
DE  
XX cobalamin-bound detectable; radioimaging; infectious disease;  
KW cardiovascular disorder; antibiotic; antiviral agent; ss.  
XX Synthetic.  
OS  
XX WO2003026674-A1.  
PN  
XX 03-APR-2003.  
PD  
XX 30-SEP-2002; 2002WO-US031038.  
PF  
XX 28-SEP-2001; 2001US-0326183P.  
PR  
XX (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.  
PA  
XX Collins DA;  
PI  
XX WPI; 2003-393314/37.  
DR  
XX Composition useful for the treatment of e.g. infectious disease,  
PT comprises a cobalamin-bound detectable or therapeutic agent in  
PT combination with a cobalamin transport protein.  
PT  
XX Example 4; SEQ ID NO 14; 97pp; English.  
PS  
XX The present invention relates to a cobalamin-bound detectable or  
CC therapeutic agent in combination with a cobalamin transport protein. In  
CC the manufacture of a medicament to increase the uptake of detectable  
CC agent useful in radioimaging or therapeutic agent for treatment of a  
CC disorder associated with abnormal cellular proliferation, an infectious  
CC disease and cardiovascular disorder; as an antibiotic or antiviral agent;  
CC for transfection of a factor. The method increases efficiency of  
CC vitamin B12 or vitamin B12 conjugated materials. The presents sequence  
CC represents an antisense nucleotide that can be conjugated to the carriers  
CC described in the present invention.  
XX  
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;  
SQ  
Query Match 0.9%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 85.0%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 130 CGGATGAGAGATCAACG 149  
DB 21 CGCAGAGAGAGCAACG 2  
RESULT 362  
ADC24653/C  
ID ADC24653 standard; DNA; 21 BP.  
XX  
XX ADC24653;  
AC  
XX 18-DEC-2003 (first entry)  
DT  
XX Antisense DNA #1 that can be conjugated to the carriers of invention.  
DE  
XX

```

KW cobalamin-bound detectable; radioimaging; infectious disease;
KW cardiovascular disorder; antibiotic; antiviral agent; ss.
OS Synthetic.
XX WO2003026674-A1.
XX
XX 03-APR-2003.
XX
XX 30-SEP-2002; 2002WO-US031038.
XX
XX 28-SEP-2001; 2001US-0326183P.
XX
XX (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
XX
XX Collins DA;
XX
XX WPI; 2003-393314/37.
XX
XX Composition useful for the treatment of e.g. infectious disease,
XX comprises a cobalamin-bound detectable or therapeutic agent in
XX combination with a cobalamin transport protein.
XX
XX Example 4; SEQ ID NO 1; 97pp; English.
XX
XX The present invention relates to a cobalamin-bound detectable or
XX therapeutic agent in combination with a cobalamin transport protein. In
XX the manufacture of a medicament to increase the uptake of detectable
XX agent useful in radioimaging or therapeutic agent for treatment of a
XX disorder associated with abnormal cellular proliferation, an infectious
XX disease and cardiovascular disorder; as an antibiotic or antiviral agent;
XX for transfection of a factor. The method increases efficiency of
XX vitamin B12 or vitamin B12 conjugated materials. The presents sequence
XX represents an antisense nucleotide that can be conjugated to the carriers
XX described in the present invention.
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 5e-02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 130 CGGATGAGAGATCAACG 149
XX ||| ||||| ||||| |||||
XX Db 21 CGCAAGAAGAGAGCAACG 2
XX
XX RESULT 363
XX AAD59026/C
XX ID AAD59026 standard; DNA; 21 BP.
XX
XX AC AAD59026;
XX
XX DT 18-DEC-2003 (first entry)
XX
XX DE Human cytomegalovirus (HCMV) gene specific antisense oligo, ISIS 2922.
XX
XX KW Inflammatory bowel disorder; ulcerative colitis; Crohn's disease;
XX cellular proliferation; Human cytomegalovirus; HCMV; antisense;
XX phosphorothioate backbone; ss.
XX
XX OS Human cytomegalovirus.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FT modified_base 1..21
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone; Optionally all
XX FT cytidines are 5-methyl cytidines"
XX FT modified_base 1..6
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT

```

```

FT modified_base 15..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "Optionally 2'-methoxyethyl nucleotides"
XX
XX PN US2003040497-A1.
XX
XX 27-FEB-2003.
XX
XX 21-DEC-2001; 2001US-00029598.
XX
XX 01-JUL-1997; 97US-00886829.
XX
XX 01-JUL-1998; 98US-00108673.
XX
XX 20-MAY-1999; 99US-00315298.
XX
XX (TENG/) TENG C.
XX (COOK/) COOK P D.
XX (TILL/) TILLMAN L.
XX (HARD/) HARDEE G E.
XX (ECKE/) ECKER D J.
XX (MANO/) MANOHARAN M.
XX
XX Teng C, Cook PD, Tillman L, Hardee GE, Ecker DJ, Manoharan M;
XX
XX WPI; 2003-596370/56.
XX
XX Formulation, useful for treating inflammatory bowel disorder, e.g.
XX ulcerative colitis or Crohn's disease, comprises oligonucleotide for
XX rectal delivery.
XX
XX Example 2; Page 11; 45pp; English.
XX
XX The invention relates to formulations and methods which enhance the local
XX and systemic uptake and delivery of oligonucleotides and nucleic acids
XX via non-parenteral routes of administration. The formulation is used for
XX treating inflammatory bowel disorders, e.g. ulcerative colitis, Crohn's
XX disease or inflammatory bowel disease, in animals (e.g. human). It can
XX also be used for treating undue cellular proliferation. The present
XX sequence is an antisense oligonucleotide targetted against Human
XX cytomegalovirus (HCMV) gene. This sequence is used to illustrate the
XX method of the invention
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 5e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 130 CGGATGAGAGATCAACG 149
XX ||| ||||| ||||| |||||
XX Db 21 CGCAAGAAGAGAGCAACG 2
XX
XX RESULT 364
XX AAD59034/C
XX ID AAD59034 standard; DNA; 21 BP.
XX
XX AC AAD59034;
XX
XX DT 18-DEC-2003 (first entry)
XX
XX DE Antisense oligonucleotide #2.
XX
XX KW Inflammatory bowel disorder; ulcerative colitis; Crohn's disease;
XX cellular proliferation; phosphorothioate backbone; antisense; ss.
XX
XX OS Unidentified.
XX
XX FH Key Location/Qualifiers
XX FT modified_base 1..21
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT

```

```
FT modified_base /note= "Phosphorothioate backbone"
FT 1. .7
FT /tag= b
FT /mod_base= OTHER
FT modified_base
FT 2
FT /tag= c
FT /mod_base= m5c
FT modified_base
FT 8
FT /tag= d
FT /mod_base= m5c
FT modified_base
FT 10
FT /tag= e
FT /mod_base= m5c
FT modified_base
FT 13
FT /tag= f
FT /mod_base= m5c
FT modified_base
FT 16
FT /tag= g
FT /mod_base= m5c
FT modified_base
FT 20
FT /tag= h
FT /mod_base= m5c
FT
FT US2003040497-A1.
FT
FT 27-FEB-2003.
FT
FT 21-DEC-2001; 2001US-00029598.
FT
FT 01-JUL-1997; 97US-00886829.
FT 01-JUL-1998; 98US-00108673.
FT 20-MAY-1999; 99US-00315298.
FT
FT (TENG/) TENG C.
FT (COOK/) COOK P. D.
FT (TILL/) TILLMAN L.
FT (HARD/) HARDEE G. E.
FT (ECKER/) ECKER D. J.
FT (MANO/) MANOHARAN M.
FT
FT Teng C, Cook PD, Tillman L, Hardee GE, Ecker DJ, Manoharan M;
FT WPI; 2003-596370/56.
FT
FT Formulation, useful for treating inflammatory bowel disorder, e.g.
FT ulcerative colitis or Crohn's disease, comprises oligonucleotide for
FT rectal delivery.
FT
FT Disclosure; Page 43; 45pp; English.
FT
FT The invention relates to formulations and methods which enhance the local
FT and systemic uptake and delivery of oligonucleotides and nucleic acids
FT via non-parenteral routes of administration. The formulation is used for
FT treating inflammatory bowel disorders, e.g. ulcerative colitis, Crohn's
FT disease or inflammatory bowel disease, in animals (e.g. human). It can
FT also be used for treating undue cellular proliferation. The present
FT sequence is an antisense oligonucleotide used to illustrate the method of
FT the invention
FT
FT Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
FT
FT Query Match 0.9%; Score 15.2; DB 1; Length 21;
FT Best Local Similarity 85.0%; Pred. No. 5e+02;
FT Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
FT
FT QY 130 CGGATGAAGAGATCAACG 149
FT ||| ||||| |||||
FT Db 21 CGCAAGAAGAGAGCAACG 2
FT
FT RESULT 365
FT ADD44701/C
```

```
ID ADD44701 standard; DNA; 21 BP.
XX
XX AC
XX ADD44701;
XX
XX DT 15-JAN-2004 (first entry)
XX
XX DE CMV antisense oligonucleotide #1.
XX
XX KW CMV; ss; antisense; virucide; anti-HIV; antiarteriosclerotic; cytostatic;
XX 2'-fluoro substituent; AIDS; atherosclerosis; cancer; DNA-RNA Hybrid.
XX
XX OS Human herpesvirus 5.
XX
XX PN US2003187240-A1.
XX
XX PD 02-OCT-2003.
XX
XX PF 28-JAN-2003; 2003US-00352586.
XX
XX PR 11-JAN-1990; 90US-00463358.
XX 13-AUG-1990; 90US-00566977.
XX 05-MAR-1992; 92US-00835932.
XX 06-JUN-1995; 95US-00468037.
XX 02-SEP-1999; 99US-00389283.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Cook PD, Kawasaki AM;
XX
XX DR WPI; 2003-831271/77.
XX
XX Modified oligonucleotides useful as therapeutics, diagnostics and
XX research agents comprises several covalently bound nucleosides joined by
XX internucleoside linkages.
XX
XX Example 34; SEQ ID NO 18; 48pp; English.
XX
XX The invention relates to a modified oligonucleotide comprising several
XX covalently bound nucleosides including a ribose or deoxyribose sugar
XX portion and a base portion. The nucleosides are joined together by
XX internucleoside linkages such that the base portion of the nucleosides
XX form a mixed base sequence. At least one of the nucleosides includes a
XX modified ribofuranosyl moiety bearing a 2'-fluoro substituent. The
XX antisense oligonucleotides of the invention are useful as therapeutics,
XX diagnostics and research agents e.g. for the treatment of various viruses
XX (e.g. AIDS), for modulating the production of proteins by an organism,
XX treating an organism having a disease involving an undesired production
XX of a protein (e.g. atherosclerosis, cancer), detecting the presence or
XX absence of abnormal RNA molecules, or abnormal or inappropriate
XX selective binding of RNA for use as research reagents and diagnostic
XX agents. The compounds have improved stability to enzymatic degradation
XX with various intracellular and extracellular nucleases, and improved
XX ability to bind to a specific DNA or RNA with fidelity compared to wild-
XX type DNA-DNA and RNA-DNA duplexes and phosphorus-modified oligonucleotide
XX duplexes containing methylphosphonates, phosphoramidates and phosphate
XX triesters. The present sequence is an antisense oligonucleotide of the
XX invention targeting CMV replication.
XX
XX Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
XX
XX Query Match 0.9%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 5e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 130 CGGATGAAGAGATCAACG 149
XX ||| ||||| |||||
XX Db 21 CGCAAGAAGAGAGCAACG 2
XX
XX RESULT 366
XX AAQ43226
XX ID AAQ43226 standard; DNA; 22 BP.
```



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XX AC AAQ43226;
XX DT 25-MAR-2003 (revised)
XX DT 13-OCT-1993 (first entry)
XX DE B-B10 V region primer VHBacK #1.
XX KW Complementarity-determining region; CDR; humanised; antibody; hIL2R;
XX KW human; interleukin; IL-2; receptor; murine; anti-human; Ab; T-cell;
XX KW monoclonal antibody; B-B10; mixed lymphocyte reaction; variable; V;
XX KW region; PCR; framework; plasmid; heavy; H; light; L; amplify; primer;
XX KW polymerase chain reaction; ss.
XX OS Synthetic.
XX PN WO9311238-A1.
XX PD 10-JUN-1993.
XX PF 03-DEC-1992; 92WO-JP001583.
XX PR 06-DEC-1991; 91JP-00323319.
XX PA (SUMI) SUMITOMO PHARM CO LTD.
XX PA (BIOT) BIOTEST PHARMA GMBH.
XX PA (INNO-) INNOTHERAPIE LAB.
XX PI Nakatani T, Gomi H, Wijdenes J, Noguchi H;
XX WPI; 1993-197057/24.
XX DR Humanised antibody comprising - CDR region of mouse MAB B-B10 specific
XX PT for IL-2 receptor useful for treating carcinoma expressing IL-2 receptor.
XX PS Disclosure; Page 44; 62pp; English.
XX CC The sequences given in AAQ43226-32 are primers which were used in the
XX CC cloning of DNA encoding the variable (V) regions of the murine anti-
XX CC human IL-2 receptor monoclonal Ab (MAB) B-B10. This MAB was used in the
XX CC construction of a humanised antibody (Ab) which binds specifically to
XX CC human interleukin (IL)-2 receptor (hIL2R). The complementarity-
XX CC determining regions (CDRs) for the hIL2R MAB were derived from B-B10 (see
XX CC also AAR37595-04). The hIL2R MAB is antagonistic to the binding of IL-2
XX CC to the IL-2 receptor on human T-cells. It also inhibits the human mixed
XX CC lymphocyte reaction. The cDNA encoding the variable (V) region of the B-
XX CC B10 Ab was cloned by PCR and sequenced (see also AAQ43233-36). A human Ab
XX CC with high levels of amino acid sequence homology to the murine sequence
XX CC was selected and the framework of this Ab was bound with the B-B10 V
XX CC region CDR and a part of the framework to design several kinds of the
XX CC humanised B-B10 V region. The DNA sequence coding this humanised B-B10
XX CC was synthesised and a plasmid expressing humanised B-B10 was constructed.
XX CC (Updated on 25-MAR-2003 to correct PN field.)
XX SQ Sequence 22 BP; 7 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 22;
Best Local Similarity 85.0%; Pred. No. 5.2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 140 AGATCAAAAGCGCAGCTGTCA 159
DB 1 AGGTCAAACTGCAGCAGTCA 20

RESULT 367
AAQ85817/C
ID AAQ85817 standard; DNA; 22 BP.
XX AAQ85817;
XX AAQ85817;
XX 25-MAR-2003 (revised)
XX DT 07-NOV-1995 (first entry)

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```

XX Anti-CMV 2'-O-alkylamino-containing oligomer #70.
XX DE Alkylamino group; ribofuranosyl sugar; antisense therapy; virus; HIV;
XX KW herpes; papilloma; antiviral; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX misc_feature 1..22
XX /tag= b
XX /note= "contains phosphorothioate linkages between
XX nucleosides"
XX modified_base 1
XX /tag= a
XX /mod_base= OTHER
XX /note= "2'-O-[hexyl-N-(3-oxycarbonyl-cholesteryl)amino]-
XX uridine or may be 5'-O-dimethoxytrityl-2'-O-[hexyl-N-(5-
XX thiocarbonyl-3,6-dipivoyl fluorescein)amino]uridine"
XX WO9506659-A1.
XX PN 09-MAR-1995.
XX PD 02-SEP-1994; 94WO-US010131.
XX PF 03-SEP-1993; 93US-00117363.
XX PR (ISIS-) ISIS PHARM INC.
XX PA Cook PD, Manoharan M, Guinasso CJ;
XX PI WPI; 1995-115397/15.
XX DR New amine-derivatised nucleoside(s) and oligo:nucleoside(s) - useful as
XX PT diagnostics, therapeutics and research reagents, partic. in anti-sense
XX PT therapy.
XX PS Example 43-44; Page 56; 117pp; English.
XX CC Oligomers AAQ85816-21 are generated to contain a 2'-O-alkylamino-modified
XX CC nucleoside containing either a cholesterol or fluorescein functional
XX CC group. This sequence is an analogue of an antisense sequence to a
XX CC cytomegalovirus (CMV) sequence. The modified nucleosides may increase the
XX CC half-life of the oligomers in cell extract assays for the inhibition of a
XX CC specific target sequences. The modified oligomer is an example of a
XX CC compound (see AAQ85799-Q85839 for other examples) e.g. a nucleoside or
XX CC oligonucleoside, which contains a ribofuranosyl sugar portion and a base
XX CC portion, such that at least one of the nucleoside contains at a 2'-O-, 3'-
XX CC -O- or 5'-O-position, a substitution (see AAQ85799 for details of the
XX CC substitutions). The compounds are useful in diagnostics, therapeutics and
XX CC as research reagents particularly in antisense therapy for killing cells
XX CC and viruses such as HIV, herpes or papilloma viruses. (Updated on 25-MAR-
XX CC 2003 to correct PN field.)
XX SQ Sequence 22 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 1 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 22;
Best Local Similarity 85.0%; Pred. No. 5.2e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAGAGATCAACG 149
DB 22 CGCAAGAGAGAGACACG 3

RESULT 368
AAT98198/C
ID AAT98198 standard; DNA; 22 BP.
XX AAT98198;
XX AAT98198;
XX 25-MAR-1998 (first entry)

```

XX DE Oligonucleotide for murine Ig CH4 domain.  
XX KW Sea firefly; Vargula; luciferase; label; mouse; immunoglobulin; murine;  
XX KW constant heavy domain; epidermal growth factor receptor; fusion protein;  
XX KW luminescent enzyme; ss.  
XX OS Synthetic.  
XX OS Mus sp.  
XX PN JP09056384-A.  
XX PD 04-MAR-1997.  
XX PF 25-AUG-1995; 95JP-00216911.  
XX PR 25-AUG-1995; 95JP-00216911.  
XX PA (TORA ) TORAY IND INC.  
XX DR WPI; 1997-492889/46.  
XX A method of labelling cells - comprising a luminescent protein fused to a  
XX trans-membrane receptor.  
XX PS Example 3; Page 3; 9pp; Japanese.  
XX CC This oligonucleotide was used to generate a fusion protein in which the  
XX sea firefly (Vargula sp.) luciferase is linked to an epidermal growth  
XX factor receptor, via a mouse immunoglobulin (Ig) constant heavy domain 4  
XX (CH4) chain. This oligonucleotide was used to construct the CH4 linker.  
XX CC This is an example of a method of detectably labelling cells by fusing a  
XX secretory-type luminescent enzyme with a cell membrane protein and  
XX CC expressing the fusion protein on the cell membrane  
XX SQ Sequence 22 BP; 8 A; 6 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15.2; DB 1; Length 22;  
Best Local Similarity 85.0%; Pred. No. 5.2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1726 GTTACCTGCGACTGTGCC 1745  
DB 20 GTTACCTGCGACTGTGCC 1  
RESULT 369  
AAS10876/c  
ID AAS10876 standard; DNA; 22 BP.  
XX AAS10876;  
XX 24-OCT-2001 (first entry)  
XX Human NOV2 RTQ PCR forward primer.  
XX Human; NOV2; ss; fertility disorder; spermatogenesis; cardiac;  
XX cytosolic; immunomodulatory; antiproliferative; antidiabetic;  
XX cell proliferation; cancer; diabetic retinopathy; angiogenic disorder;  
XX pulmonary disorder; haematopoietic disorder; immunological disorder;  
XX inflammatory disorder; tumour related disorders; emphysema; cirrhosis;  
XX wound healing; gene therapy; RTQ PCR primer; Real-time quantitative PCR.  
XX OS Homo sapiens.  
XX OS Synthetic.  
XX PN WO200149729-A2.  
XX PD 12-JUL-2001.  
XX PF 05-JAN-2001; 2001WO-US000299.  
XX PR 06-JAN-2000; 2000US-0174724P.

PR 11-JAN-2000; 2000US-0175434P.  
PR 11-JAN-2000; 2000US-0175488P.  
PR 12-JAN-2000; 2000US-0175696P.  
PR 12-JAN-2000; 2000US-0175743P.  
PR 13-JAN-2000; 2000US-0175819P.  
PR 07-AUG-2000; 2000US-0223524P.  
PR 04-JAN-2001; 2001US-0075566S.  
XX (CURA-) CURAGEN CORP.  
XX Prayaga SK, Majumder K, Taillon BE, Spaderna SK, Spytek KA;  
XX Macdougall J;  
XX WPI; 2001-418356/44.  
XX Nucleic acids encoding polypeptides, designated NOVX polypeptides, useful  
XX for treating a syndrome associated with a NOVX-associated disorder, e.g.  
XX cell proliferation (e.g. cancer and diabetic retinopathy), angiogenic or  
XX pulmonary disorder.  
XX Example 1; Page 120; 14pp; English.  
XX The invention relates to nucleic acids encoding NOVX (X being an integer  
XX from 1-8) polypeptides. The NOVX nucleic acids and polypeptides are  
XX useful in diagnosing, treating or manufacturing a medicament for a  
XX disease or disorder associated with NOVX e.g. cell proliferation (cancer  
XX and diabetic retinopathy), angiogenic or pulmonary disorders, fertility  
XX disorders (e.g. of spermatogenesis), haematopoietic, immunological,  
XX inflammatory and tumour related disorders, emphysema, cirrhosis, wound  
XX healing. NOVX nucleic acids are also useful in gene therapy. They are  
XX also used for screening for a modulator of activity or of latency or  
XX predisposition to a NOVX-associated disorder. They are also useful for  
XX determining the presence of or predisposition to a NOVX-associated  
XX disorder. The present sequence is an RTQ PCR primer (real-time  
XX quantitative PCR) for amplifying nucleic acids encoding human NOV2  
XX SQ Sequence 22 BP; 6 A; 5 C; 5 G; 6 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15.2; DB 1; Length 22;  
Best Local Similarity 85.0%; Pred. No. 5.2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1426 ATCTCCGACGAGGATGCCAT 1445  
DB 22 ATCTCCGACGAGGATGCCAT 3  
RESULT 370  
ABS59071/c  
ID ABS59071 standard; DNA; 22 BP.  
XX ABS59071;  
XX 05-NOV-2002 (first entry)  
XX Human G-protein coupled receptor, reverse primer #73.  
XX Human; G-protein coupled receptor; GPCR; cardiomyopathy; atherosclerosis;  
XX diabetes; cell signal processing; metabolic pathway modulation; cancer;  
XX adenocarcinoma; lymphoma; prostate cancer; uterus cancer; asthma;  
XX immune response; neurodegenerative disorder; inflammatory disorder;  
XX Crohn's disease; multiple sclerosis; Albright hereditary osteodystrophy;  
XX primer; PCR; ss.  
XX OS Homo sapiens.  
XX PN WO200259313-A2.  
XX PD 01-AUG-2002.  
XX PF 18-DEC-2001; 2001WO-US049394.  
XX PR 18-DEC-2000; 2000US-0256635P.





PI Cottarel G, Damagnez V, Draetta G;  
 DR WPI; 1997-043149/04.  
 XX  
 PT Candida cell-cycle regulatory proteins - used to develop prods. for the  
 diagnosis, treatment and prevention of fungal infections.  
 XX  
 PS Example 3; Page 35; 70pp; English.  
 XX  
 CC Six Candida genes have been isolated, which encode an apparent CDC25  
 phosphatase (TYP1), a p13suc1 homolog (CKS1), a cyclin dependent kinase  
 (CDK1), a cyclin (CYB1), a CDK-activating kinase catalytic subunit  
 (MOG1), and a Map kinase (CMK1) (AA064446 to AA064451). The TYP1  
 polypeptide and nucleic acid is claimed, where TYP1 is at least 75%  
 homologous to the amino acid sequence given in Seq 2, according to the  
 claims of the specification. According to the disclosure, Seq 2 encodes  
 CKS1 (AA064446) and Seq 1 encodes TYP1 (AA064447). The products may be  
 used in reagents and assays which permit the rapid detection and  
 evaluation of Candida yeast infections and for identifying cpds. which  
 have antifungal properties and which may be used as anti-mycotic agents.  
 CC Such agents can be used therapeutically, as well as, for example,  
 preservatives in foodstuff, feed supplement for promoting weight gain in  
 livestock, or in disinfectant formulations for treatment of non-living  
 CC matter, e.g. for decontaminating hospital equipment and rooms  
 XX  
 SQ Sequence 23 BP; 3 A; 5 C; 4 G; 3 T; 0 U; 8 Other;  
 Query Match 0.9%; Score 15.2; DB 1; Length 23;  
 Best Local Similarity 60.9%; Pred. No. 5.4e+02;  
 Matches 14; Conservative 3; Mismatches 6; Indels 0; Gaps 0;  
 QY 1093 ACACGTGTGTCACGCCCCCTGA 1115  
 DB 23 ACNYTNTGGTAYMGNCNCNGA 1  
 RESULT 374  
 AA094132/c  
 ID AAT94132 standard; DNA; 23 BP.  
 XX  
 AC AAT94132;  
 XX  
 DT 22-MAY-1998 (first entry)  
 XX  
 DE Primer 9826 for haematopoietic cytokine receptor Zcytor1 cDNA.  
 XX  
 KW Haematopoietic cytokine receptor; Zcytor1; ligand detection;  
 cancer diagnosis; agonist; antagonist; PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Mus sp.  
 XX  
 PN WO9744455-A1.  
 XX  
 PD 27-NOV-1997.  
 XX  
 PF 19-MAY-1997; 97WO-US008502.  
 XX  
 PR 23-MAY-1996; 96US-00653740.  
 XX  
 PA (ZYMO) ZYMOGENETICS INC.  
 XX  
 PI Baumgartner JW, Foster DC, Grant FJ, Sprecher CA;  
 XX  
 DR WPI; 1998-018509/02.  
 XX  
 CC Haematopoietic cytokine receptor - useful for ligand detection, and  
 PT pathological condition diagnosis.  
 XX  
 PS Example 5; Page 65; 86pp; English.  
 XX  
 CC The present sequence is a primer for the cDNA encoding a haematopoietic  
 CC cytokine receptor Zcytor1, useful for ligand detection, and pathological

CC condition diagnosis, including cancer. Receptor agonists of the protein  
 CC can be used to stimulate the proliferation and development of target  
 CC cells in vitro and in vivo. The agonists can stimulate cell mediated  
 CC immunity and lymphocyte proliferation, to treat infection involving  
 CC immunosuppression, e.g. viral infections. They may also be used to  
 CC suppress tumours, induce cytotoxicity, treat leukaemias and enhance the  
 CC regeneration of the T-cell repertoire after bone marrow transplantation.  
 CC Antagonists of the protein may be used to suppress the immune system,  
 CC treat autoimmune diseases, including rheumatoid arthritis, multiple  
 CC sclerosis and diabetes mellitis. Immune suppression caused by the  
 CC antagonists can also be used to reduce rejection of tissue or organ  
 CC transplants and grafts, and to treat T-cell specific leukaemias and  
 CC lymphomas  
 XX  
 SQ Sequence 23 BP; 4 A; 5 C; 9 G; 5 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.2; DB 1; Length 23;  
 Best Local Similarity 85.0%; Pred. No. 5.4e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1294 TCCACGAGGAGGTTCAAGAC 1313  
 DB 23 TCCACGAGGAGGTTCAAGTC 4  
 RESULT 375  
 AA023767  
 ID AA023767 standard; DNA; 23 BP.  
 XX  
 AC AA023767;  
 XX  
 DT 14-JAN-2000 (first entry)  
 XX  
 DE Cloning vector multiple cloning site 3 DNA.  
 XX  
 KW Antisense; DNA library; identification; multiple cloning site; MCS;  
 KW inhibition, ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9950457-A1.  
 XX  
 PD 07-OCT-1999.  
 XX  
 PF 28-MAR-1999; 99WO-US006742.  
 XX  
 PR 28-MAR-1998; 98US-0079792P.  
 PR 06-NOV-1998; 98US-0107504P.  
 XX  
 PA (UTAH) UNIV UTAH RES FOUND.  
 XX  
 PI Ruffner DE, Pierce ML, Chen Z;  
 XX  
 DR WPI; 1999-610866/52.  
 XX  
 PT Production of antisense libraries, used for identifying antisense agents  
 and for identifying target sites for antisense-mediated inhibition of a  
 selected gene.  
 XX  
 PS Claim 3; Page 37; 63pp; English.  
 XX  
 CC This invention describes a novel method for generating an antisense  
 CC library targeted to a selected RNA transcript. The methods can be used  
 CC for identifying antisense agents and for identifying target sites for  
 CC antisense-mediated inhibition of a selected gene. The use of a direct  
 CC library for target site selection significantly simplifies the screening  
 CC process, since only very small libraries need be prepared and assayed.  
 CC AA023765-23767 represent multiple cloning site DNA regions used in the  
 CC method of the invention  
 XX  
 SQ Sequence 23 BP; 8 A; 7 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15.2; DB 1; Length 23;

```
Best Local Similarity 85.0%; Pred. No. 5.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 364 GAGAGTACACGAGCTTCAGC 383
Db ||||| ||||| ||||| |||||
4 GACAGTACCAAGCTTCAGC 23

RESULT 376
AAZ08273/c
ID AAZ08273 standard; DNA; 23 BP.
XX
AC AAZ08273;
XX
DT 07-FEB-2000 (first entry)
XX
DE Degenerate PCR primer-1 used for cloning of Candida CDK1 gene.
XX
DE Cell cycle regulatory protein; CDK1 gene; cyclin dependent kinase;
KW Candida; isolate; clone; degenerate primer; genomic DNA; amplify; ss.
KW
XX Synthetic.
XX
XX WO9957536-A2.
XX
XX 11-NOV-1999.
XX
XX 05-MAY-1999; 98WO-US009878.
XX
XX 05-MAY-1998; 98US-00072994.
XX
XX (MITO-) MITOTIX INC.
XX
XX Berlin V, Cortarel G, Damagnez V, Rudolph J, Sullivan D;
PI WPI; 2000-038847/03.
XX
XX New Candida cyclin activated kinase 1, useful for generating vaccines and
PT screening for its inhibitors.
PT
XX Example 3; Page 58; 109pp; English.
XX
XX The present DNA sequence is the degenerate PCR primer-1, used to clone
CC Candida cyclin dependent kinase, CDK1 gene. It is a cell cycle regulatory
CC protein isolated from the genomic DNA of Candida albicans and was
CC amplified using PCR
CC
XX Sequence 23 BP; 3 A; 5 C; 4 G; 3 T; 0 U; 8 Other;
SQ

Query Match 0.9%; Score 15.2; DB 1; Length 23;
Best Local Similarity 60.9%; Pred. No. 5.4e+02;
Matches 14; Conservative 3; Mismatches 6; Indels 0; Gaps 0;

QY 1093 ACACTGTGTGTCACGCCGCCCTGA 1115
Db ||||| ||||| ||||| |||||
23 ACNTTGTGTATGNGCNCNGA 1

RESULT 377
AAA97452/c
ID AAA97452 standard; DNA; 23 BP.
XX
AC AAA97452;
XX
XX 29-JAN-2001 (first entry)
XX
XX Chicory germacrene A synthase A PCR primer, SEQ ID NO:11.
XX
XX Chicory; short germacrene A synthase clone; germacrene A synthase A;
KW sesquiterpene lactone biosynthesis; bitterness; pest resistance; insect;
KW nematode; micro-organism; flavour compound; fragrance; phytoalexin;
KW transgenic plant; PCR primer; ss.
XX
```

```
OS Cichorium intybus.
XX Synthetic.
XX WO200005338-A1.
XX
XX 21-SEP-2000.
XX
XX 10-MAR-2000; 2000WO-EP002130.
XX
XX 12-MAR-1999; 99EP-00870046.
XX
XX (ABDL-) AB-DLO RES INST AGROBIOLOGY & SOIL FERTI.
XX
XX Bouwmeester H, Kodde J, De Kraker J;
XX WPI; 2000-638203/61.
XX
XX Novel sesquiterpenoid synthase genes useful for reducing bitterness and
PT increasing resistance against insects, nematodes, microorganisms and
PT vertebrate herbivores in plants.
XX
XX Example 3; Page 33; 77pp; English.
XX
XX The invention relates to two chicory germacrene A synthases (AA23174,
CC AAB23175), and to nucleic acids encoding them (AAA97448, AAA97449).
CC Germacrene A synthases plays a key role in the biosynthesis of
CC sesquiterpene lactones, catalysing the formation of a germacrene
CC biosynthetic precursor from farnesyl diphosphate (FDP). Sesquiterpene
CC lactones are bitter- flavoured plant products which provide resistance
CC against insects, nematodes, microorganisms and vertebrate herbivores, and
CC are also involved in plant-plant interactions. Nucleic acids encoding of
CC chicory germacrene A synthases A and B are useful for the production of
CC transgenic plants with modified sesquiterpenoid synthase activity.
CC Reduction of germacrene A synthase expression (e.g., via the use of
CC antisense sequences) can be used to reduce bitter flavours in crops, thus
CC increasing their commercial value. Increased germacrene A synthase
CC expression may be used to obtain increased insect, nematode or
CC microorganism resistance in plants, to obtain increased formation of
CC sesquiterpene lactones with desirable properties (e.g., medicinal
CC properties), and to obtain increased formation of germacrene A-derived
CC flavour and fragrance compounds or phytoalexins. Sequences AAA97452-
CC A97453 represent PCR primers used in an exemplification of the invention
CC to introduce restriction sites into the chicory germacrene A synthase A
CC cDNA (AAA97448) for subcloning
XX
XX Sequence 23 BP; 4 A; 9 C; 4 G; 6 T; 0 U; 0 Other;
SQ

Query Match 0.9%; Score 15.2; DB 1; Length 23;
Best Local Similarity 85.0%; Pred. No. 5.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 116 CGATCGCCATGATCGGATG 135
Db ||||| ||||| ||||| |||||
21 CGAGAGCCATGGTTCGGATG 2

RESULT 378
AAH19543
ID AAH19543 standard; DNA; 23 BP.
XX
XX AAH19543;
XX
XX 23-JUL-2001 (first entry)
XX
XX Human Pz-epsilonRI alpha-chain gene oligonucleotide #2.
XX
XX Human; transcription activation; immunoglobulin E; IgE; IGE receptor;
KW Pz-epsilonRI; USP-1; USF-2; allergy; ss.
XX
XX Homo sapiens.
XX
XX JP2001057889-A.
XX
```

PD 06-MAR-2001.  
XX 23-AUG-1999; 99JP-00234854.  
XX 23-AUG-1999; 99JP-00234854.  
XX (ASAK ) ASAHI BREWERIES LTD.  
XX (TSUR/) TSURA T.  
XX WPI; 2001-310666/33.  
XX DNA having a transcription activating region of a gene, used for  
XX developing an agent for preventing and treating allergic diseases.  
XX Example 4; Page 6; 12pp; Japanese.  
XX The present sequence is provided in a specification relating to a DNA  
XX sequence which activates transcription of human high affinity  
XX immunoglobulin (Ig)E receptor (Fc-epsilonRI) alpha-chain gene. It may be  
XX used for inhibiting the activation of transcription relating to USP-1 or  
XX USP-2. The DNA contains the sequence tggggagcagctgggtaggaaac, or cagctg.  
XX The invention is useful for the development of an agent for preventing  
XX and treating allergic diseases. The present sequence was annealed to its  
XX complementary sequence to generate the double stranded DNA sequence of  
XX the invention  
XX Sequence 23 BP; 3 A; 12 C; 3 G; 5 T; 0 U; 0 Other;  
SQ

Query Match 0.9%; Score 15.2; DB 1; Length 23;  
Best Local Similarity 85.0%; Pred. No. 5.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
XX

OY 918 GTTCTGTTCCAGCTGCTCC 937  
DB 1 GTTCTACCCAGCTGCTCC 20

RESULT 379  
ID AAF99964/c  
XX AAF99964;  
XX 23-JUL-2001 (first entry)  
XX Human Fc-epsilonRI alpha-chain gene oligonucleotide #1.  
XX Human; transcription activation; immunoglobulin E; IgE; IGE receptor;  
XX Fc-epsilonRI; USF-1; USF-2; allergy; ss.  
XX Homo sapiens.  
XX JP2001057889-A.  
XX 06-MAR-2001.  
XX 23-AUG-1999; 99JP-00234854.  
XX 23-AUG-1999; 99JP-00234854.  
XX (ASAK ) ASAHI BREWERIES LTD.  
XX (TSUR/) TSURA T.  
XX WPI; 2001-310666/33.  
XX DNA having a transcription activating region of a gene, used for  
XX developing an agent for preventing and treating allergic diseases.  
XX Example 4; Page 5-6; 12pp; Japanese.  
XX The present sequence is provided in a specification relating to a DNA  
XX sequence which activates transcription of human high affinity  
XX immunoglobulin (Ig)E receptor (Fc-epsilonRI) alpha-chain gene. It may be

CC used for inhibiting the activation of transcription relating to USP-1 or  
CC USF-2. The DNA contains the sequence tggggagcagctgggtaggaaac, or cagctg.  
CC The invention is useful for the development of an agent for preventing  
CC and treating allergic diseases. The present sequence was annealed to its  
CC complementary sequence to generate the double stranded DNA sequence of  
CC the invention  
XX Sequence 23 BP; 5 A; 3 C; 12 G; 3 T; 0 U; 0 Other;  
SQ

Query Match 0.9%; Score 15.2; DB 1; Length 23;  
Best Local Similarity 85.0%; Pred. No. 5.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
XX

OY 918 GTTCTGTTCCAGCTGCTCC 937  
DB 23 GTTCTACCCAGCTGCTCC 4

RESULT 380  
ABL43248  
ID ABL43248 standard; DNA; 23 BP.  
XX ABL43248;  
XX 11-APR-2002 (first entry)  
XX Human chromosome 1p36-35 PCR primer SEQ ID NO:292.  
XX Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;  
XX PCR primer; ss.  
XX Homo sapiens.  
XX JP2001321190-A.  
XX 20-NOV-2001.  
XX 12-MAR-2001; 2001JP-00068285.  
XX 10-MAR-2000; 2000JP-00066716.  
XX (RIKA ) RIKAGAKU KENKYUSHO.  
XX (GENO-) GENOTEX YG.  
XX WPI; 2002-144136/19.  
XX Arraying genome clones.  
XX Claim 4; Page 10; 528pp; Japanese.  
XX The present invention describes a method of arraying genome clones. The  
XX method comprises: (a) clones of the genomic libraries contained in  
XX multiwell plates; (b) a primer designed based on the chromosome marker  
XX sequence is added to the mixture to carry out an amplification reaction;  
XX (c) a signal corresponding to the marker is detected from the resultant  
XX amplified product to specify the discrimination Nos. of the multiwell  
XX plates containing the clones having said marker sequence; (d) the order  
XX of the markers is changed so that the same discrimination Nos. succeed to  
XX the maximum in the specified discrimination Nos. to array the multiwell  
XX plates; (e) the clones in the multiwell plates of the specified  
XX discrimination Nos. are mixed respectively in each wells of longitudinal  
XX and lateral directions; (f) the mixed clones are cultured and the  
XX resultant cultures are amplified by using the above primer; (g) signals  
XX are detected from the amplified products; (h) the clones in the multiwell  
XX plates are specified from the detected result; and (i) the clones are  
XX reconstituted as the positions on the chromosome and arrayed. The  
XX microarray is useful for gene analysis. ABL42957 to ABL45322 represent  
XX PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634  
XX represent PCR primers for human chromosome 21q22.1, which are  
XX specifically claimed for use in the present invention  
XX Sequence 23 BP; 11 A; 10 C; 1 G; 1 T; 0 U; 0 Other;  
SQ

Query Match 0.9%; Score 15.2; DB 1; Length 23;  
Best Local Similarity 85.0%; Pred. No. 5.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1063 CCAACAGACATCTCCAA 1082  
||||| ||||| ||||| |||||  
DB 1 CCAACCAAGACAACTCCAA 20

RESULT 381  
ABZ84155/c  
ID ABZ84155 standard; DNA; 23 BP.  
XX AC ABZ84155;  
XX  
DT 14-MAY-2003 (first entry)  
XX  
DE Toxicologically relevant rat PCR primer #1314.  
XX  
KW Toxicologically relevant gene; toxicological response; PCR primer; ss.  
XX

OS Rattus sp.  
OS Synthetic.  
XX

PN WO2003016500-A2.

PD 27-FEB-2003.

PF 16-AUG-2002; 2003WO-US026514.

PR 16-AUG-2001; 2001US-0313080P.

XX (PHAS-) PHASE-1 MOLECULAR TOXICOLOGY INC.

XX Neft RE, Dunn RT, Adkins K, Pickett GG, Kier LD, Schweiser K;  
PI Alen P;  
XX

DR WPI; 2003-268322/26.

XX  
XX Determining a toxicological response to an agent, useful for screening of  
PT drugs, comprises comparing the expression profile of one or more human  
PT toxic response genes to a reference gene expression profile indicative of  
PT toxicity.

XX Claim 1; Page 334; 455pp; English.

XX The present invention describes a method (M1) for determining a  
CC toxicological response to an agent, which comprises comparing the  
CC expression profile of one or more human toxic response genes to a  
CC reference gene expression profile indicative of toxicity, and so  
CC determining the presence of a toxic response to the agent. Also  
CC described: (1) an array comprising one or more polynucleotides selected  
CC from the genes corresponding to the partial sequences given in ABZ82842  
CC to ABZ84764, or their fragments of at least 20 nucleotides, or homologues  
CC; and (2) determining if a gene putatively identified to be a toxic  
CC response gene plays a role on toxic response pathways by determining the  
CC expression profile of the gene after exposure of cells or a human subject  
CC to a known toxic pharmaceutical or industrial agent, comprising: (a)  
CC exposing cells to an agent or isolating cells from a human subject who  
CC was exposed to an agent; (b) obtaining the test gene expression profile  
CC for a putatively identified toxic response gene after exposure to a known  
CC toxic pharmaceutical or industrial agent; and (c) comparing the test  
CC profile to the expression profile of a gene with a similar function or  
CC comparing the test profile to the expression profile of that gene after  
CC exposure to other known toxic compounds. The methods are useful for  
CC predicting and determining toxicological responses on a cellular, organ  
CC or system level. The arrays comprising the human genes are useful for  
CC toxicological screening of drugs, pharmaceutical compounds and chemicals

XX Sequence 23 BP; 3 A; 7 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 23;

Best Local Similarity 85.0%; Pred. No. 5.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 845 AGTACTGCGACAGGACCTG 864  
||||| ||||| ||||| |||||  
DB 22 AGTCGGCGGACAGGACCTG 3

RESULT 382

AAZ58475/c

ID AAZ58475 standard; DNA; 23 BP.

XX AC AAZ58475;

XX  
DT 20-NOV-2003 (first entry)

XX Antisense PCR primer used in the creation of 11betaHSD2 mice.

XX Mouse; transgenic; 11-beta hydroxysteroid dehydrogenase type 2; therapy;  
KW 11betaHSD2; cardiac dysfunction; PCR; primer; ss.

XX Mus musculus.

OS  
XX

PN WO2003068153-A2.

XX 21-AUG-2003.

XX 12-FEB-2003; 2003WO-US004054.

XX 13-FEB-2002; 2002US-0355812P.

XX 11-FEB-2003; 2003US-00361848.

XX (PHAA) PHARMACIA CORP.

XX McMahon EG, Wenning Q, Goellner J, Rudolph AE;

XX WPI; 2003-671623/63.

XX New transgenic mouse expressing an increased activity of enzyme 11-beta

PT hydroxysteroid dehydrogenase 2 in its heart, useful as a model system for

PT identifying and developing new drugs for treating cardiac dysfunction.

XX Example 1; Page 9; 35pp; English.

XX The invention relates to a transgenic mouse which expresses an increased

CC amount of enzyme activity of 11-beta hydroxysteroid dehydrogenase type 2

CC (11betaHSD2) in its heart relative to a non-transgenic isogenic mouse.

CC The transgenic mouse is useful as a model system for identifying and

CC developing new drugs for treating cardiac dysfunction. The present

CC sequence is a PCR primer used in the creation of 11betaHSD2 mice

XX Sequence 23 BP; 7 A; 8 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 15.2; DB 1; Length 23;

Best Local Similarity 85.0%; Pred. No. 5.4e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 237 TGTGTGGCGGACGTGACCTG 256  
||||| ||||| ||||| |||||  
DB 22 TGTGTGGCGGACGTGACCTG 3

RESULT 383

AAF50618

ID AAF50618 standard; DNA; 15 BP.

XX AC AAF50618;

XX 30-MAR-2001 (first entry)

XX IGF-I oligonucleotide #1578.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;



|   |   |
|---|---|
| KW  | cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; |
| KW  | skin disorder; insulin-like Growth factor 1 receptor; IGF-1; ptyriasis;   |
| KW  | IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;   |
| KW  | growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  |
| KW  | keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  |
| KW  | hyperneovascular condition; hyperplasia; kidney disease;                  |
| KW  | neovascular condition of the retina; ss.                                  |
| XX  |   |
| OS  | Homo sapiens.   |
| XX  |   |
| PN  | WO200078341-A1.   |
| XX  |   |
| PD  | 28-DEC-2000.  |
| XX  |   |
| PF  | 21-JUN-2000; 2000WO-AU000693.   |
| XX  |   |
| PR  | 21-JUN-1999; 99US-0140345P.   |
| XX  |   |
| PA  | (MURD-) MURDOCH CHILDRENS RES INST.                                       |
| PI  | Wright CJ, Werther GA, Edmondson SR;                                      |
| XX  |   |
| DR  | WPI; 2001-041421/05.  |
| XX  |   |
| PT  | Ameliorating the effects of a disorder, e.g. psoriasis, by administering  |
| PT  | UV (ultra-violet) treatment (optional) and an antisense nucleic acid that |
| PT  | inhibits or reduces growth factor mediated cell proliferation and/or      |
| PT  | inflammation.   |
| XX  |   |
| PS  | Example 8; Page 71; 201pp; English.                                       |
| XX  |   |
| CC  | The present invention relates to a method for ameliorating the effects of |
| CC  | skin disorders. The method comprises contacting the skin with an          |
| CC  | antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1        |
| CC  | receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of   |
| CC  | inhibiting or reducing growth factor mediated cell proliferation,         |
| CC  | inflammation and/or other disorders. The present sequence is an           |
| CC  | oligonucleotide which can be used to design the antisense                 |
| CC  | oligonucleotides of the present invention (see AAF45151 and AAF45153-     |
| CC  | F45161). The method is useful for ameliorating the effects of psoriasis,  |
| CC  | ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,     |
| CC  | neoplasias, scleroderma, warts, benign growths, cancers of the skin, a    |
| CC  | hyperneovascular condition such as a neovascular condition of the retina, |
| CC  | brain or skin, growth factor-mediated malignancies, other sclerotic       |
| CC  | disease, kidney disease, hyperproliferation of the inside of blood        |
| CC  | vessels or any other hyperplasia  |
| XX  |   |
| SQ  | Sequence 15 BP; 2 A; 7 C; 4 G; 2 T; 0 U; 0 Other;                         |
| Query Match 0.9%; Score 15; DB 1; Length 15;                |   |
| Best Local Similarity 100.0%; Pred.No. 3.8e+02;             |   |
| Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0; |   |
| QY  | 1101 GTACCGGCCCTCTGA 1115   |
|   |   |
| Db  | 1 GTACCGGCCCTCTGA 15  |
| RESULT 384  |   |
| AAF50617  |   |
| ID  | AAF50617 standard; DNA; 15 BP.  |
| XX  |   |
| AC  | AAF50617;   |
| XX  |   |
| DT  | 30-MAR-2001 (first entry)   |
| XX  |   |
| DE  | IGF-I oligonucleotide #1577.  |
| XX  |   |
| KW  | Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;    |
| KW  | cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; |
| KW  | skin disorder; insulin-like Growth factor 1 receptor; IGF-1; ptyriasis;   |
| KW  | IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;   |
| KW  | growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  |
| KW  | keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  |
| KW  | hyperneovascular condition; hyperplasia; kidney disease;                  |
| KW  | neovascular condition of the retina; ss.                                  |

keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
hyperneovascular condition; hyperplasia; kidney disease;  
neovascular condition of the retina; ss.  
Homo sapiens.  
W0200078341-A1.  
28-DEC-2000.  
21-JUN-2000; 2000WO-AU000693.  
21-JUN-1999; 99US-010345P.  
(MURD-) MURDOCH CHILDRENS RES INST.  
Wraight CJ, Werther GA, Edmondson SR;  
WPI; 2001-041421/05.  
Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
UV (ultra-violet) treatment (optional) and an antisenesc nucleic acid that  
inhibits or reduces growth factor mediated cell proliferation and/or  
inflammation.  
Example 8; Page 71; 20ipp; English.  
The present invention relates to a method for ameliorating the effects of  
skin disorders. The method comprises contacting the skin with an  
antisenesc oligonucleotide, (for insulin-like Growth Factor [IGF]-1  
receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
inhibiting or reducing growth factor mediated cell proliferation,  
inflammation and/or other disorders. The present sequence is an  
oligonucleotide which can be used to design the antisenesc  
oligonucleotides of the present invention (see AAP45151 and AAP45153-  
P45161). The method is useful for ameliorating the effects of psoriasis,  
ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
hyperneovascular condition such as a neovascular condition of the retina,  
brain or skin, growth factor-mediated malignancies, other sclerotic  
disease, kidney disease, hyperproliferation of the inside of blood  
vessels or any other hyperplasia  
Sequence 15 BP; 1 A; 7 C; 5 G; 2 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1100 GGTACGGGCCCCCTG 1114  
Dd 1 GGTACGGGCCCCCTG 15  
RESULT 385  
AAF50619  
ID AAF50619 standard; DNA; 15 BP.  
AC AAF50619;  
XX  
XX 30-MAR-2001 (first entry)  
XX  
XX IGF-I oligonucleotide #1579.  
XX  
XX Antisenesc therapy; antiproliferative; antiinflammatory; antipsoriatic;  
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
XX hyperneovascular condition; hyperplasia; kidney disease;  
XX neovascular condition of the retina; ss.  
XX



PS Example 15; Col 38; 36pp; English.

CC This is a human G-alpha-12 antisense nucleotide sequence. G-alpha-12 is a  
CC member of the G12/13 subfamily of G-proteins. The primary function of G-  
CC alpha-12 is in cell differentiation and growth. The invention relates to  
CC antisense compounds which are 8-30 nucleotides long (see AA257668-  
CC 257746). The antisense molecules are targeted to the human G-alpha-12  
CC nucleic acid molecule, and inhibit the expression of G-alpha-12. The  
CC molecules preferably have a modified internucleotide linkage, and at  
CC least one modified sugar moiety. The compounds target different regions  
CC of the human G-alpha-12 RNA. The expression of human G-alpha 12 is  
CC inhibited by contacting human cells or tissues in vitro with the  
CC antisense molecules. The oligonucleotides are used in modulating the  
CC function of nucleic acid molecules encoding G-alpha-12, ultimately  
CC modulating the amount of G-alpha-12 produced. The antisense compounds can  
CC be utilized for diagnostics, therapeutics, prophylaxis and as research  
CC agents and kits. They may be useful in the treatment of cancer, and  
CC metastatic growth

XX SQ Sequence 18 BP; 4 A; 4 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. NO. 4.6e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1633 AGCAGGCGGCGCTG 1647  
DB 1 AGCAGGCGGCGCTG 15

RESULT 388  
AA82618  
ID AA82618 standard; DNA; 19 BP.

XX AC AA82618;

XX DT 04-DEC-2000 (first entry)

XX DE cdk2 ribozyme binding site #55.

XX KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX OS Mammalia.

XX PN WO200032765-A2.

XX PD 08-JUN-2000.

XX PF 06-DEC-1999; 93WO-US028772.

XX PR 04-DEC-1998; 98US-0110954P.

XX PA (IMMU-) IMMUSOL INC.

XX PI Tritz R, Welch PJ, Barber JR, Robbins JM;

XX DR WPI; 2000-412314/35.

XX PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
XX RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
XX PCNA and Cyclin B1.

XX PS Disclosure; Page 49; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AA82415 to AA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment

SQ Sequence 19 BP; 2 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. NO. 4.9e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 922 CUGTTCGAGCGGCC 936  
DB 5 CUGTTCGAGCGGCC 19

RESULT 389  
AAH57780

ID AAH57780 standard; DNA; 19 BP.

XX AC AAH57780;

XX DT 10-SEP-2001 (first entry)

XX DE Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:204.

XX KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
XX recognition site; target; ribozyme binding site; eye disease; vulvarry;  
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
XX matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
XX antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;  
XX antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
XX sickle cell retinopathy; ss.

XX OS Homo sapiens.  
XX Synthetic.

XX PN WO200130362-A2.

XX PD 03-MAY-2001.

XX PF 26-OCT-2000; 2000WO-US029500.

XX PR 26-OCT-1999; 99US-0161532P.

XX PA (IMMU-) IMMUSOL INC.

XX PI Robbins JM, Tritz R;

XX DR WPI; 2001-300427/31.

XX PT Treating proliferative skin or eye diseases and scarring, using ribozymes  
XX that cleave RNA encoding cytokines involved in inflammation, matrix  
XX metalloproteinases, growth factors and cell-cycle dependent kinases.

XX PS Example 1; Page 86; 408pp; English.

XX The present invention describes a method for treating a proliferative  
XX skin or eye disease and scarring. The method involves administering a  
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in  
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
XX dependent kinase, growth factor or a reductase, or administering a  
XX nucleic acid molecule (II) comprising a promoter operably linked to a  
XX nucleic acid segment encoding (I). (I) can have antiproliferative,  
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
XX ophthalmological, vulvarry, keratolytic and virucide activities, and  
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
XX in gene therapy. (I) and (II) are useful for treating proliferative skin  
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can  
XX also be used for treating proliferative eye diseases such as diabetic  
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
XX prematurity and retinal detachment, and for treating and preventing  
XX scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
XX scar. AAH57577 to AAH62099 represent sequences used in the

CC exemplification of the present invention

XX Sequence 19 BP; 2 A; 7 C; 3 G; 7 T; 0 U; 0 Other;  
SQ

Query Match 0.9%; Score 15; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred.No. 4.9e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 922 CTGTTCCAGCTGCTC 936  
Db 5 CTGTTCCAGCTGCTC 19

RESULT 390  
AAQ15415  
ID AAQ15415 standard; DNA; 20 BP.  
XX  
AC AAQ15415;  
XX  
XX 25-MAR-2003 (revised)  
DT 19-MAR-1992 (first entry)  
XX  
DE Probe to mutant sequence #5 of exon 3 of human c-Ha-ras gene.  
XX  
KW polymerase chain reaction; PCR; nested primer; mutation; screening;  
KW ras oncogene; ss.  
XX  
OS Synthetic.  
XX  
XX Key Location/Qualifiers  
FT misc\_feature 10..13  
FT /\*tag= a  
FT /notes= "mutant TaqI site"  
XX  
XX EP461496-A.  
XX  
XX 18-DEC-1991.  
XX  
XX 01-JUN-1991; 91EP-00108976.  
XX  
XX 08-JUN-1990; 90EP-00110907.  
XX  
XX (BEHW ) BEHRINGER AG.  
XX  
XX Cerutti PA, Felleybosch E, Sandy M, Amstad P, Zijlstra J;  
PI Pourzand C;  
PI  
XX WPI; 1991-370527/51.  
XX  
PS Quantitative determination of DNA sequences - contg. mutationally  
PT eliminated restriction site(s), chain reaction using polymerase  
PT amplification and elimination of wild-type sequences.  
XX  
XX Example 2; Page 9; 16pp; English.  
XX  
XX This is one of 12 probes which differ only in the sequence at the TaqI  
CC site in the wild-type c-Ha-ras corresponding to nucleotides 2508-2511.  
CC The "mutant" probes are used to detect the 12 possible base-pair  
CC mutations potentially induced by treatment of cells with the carcinogen  
CC ethylnitrosourea. (Updated on 25-MAR-2003 to correct P1 field.)  
XX  
XX Sequence 20 BP; 4 A; 10 C; 3 G; 3 T; 0 U; 0 Other;  
SQ

Query Match 0.9%; Score 15; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred.No. 5.1e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 970 CTACACCGAGACCTC 984  
Db 5 CTACACCGAGACCTC 19

RESULT 391

AAT39013  
ID AAT39013 standard; DNA; 20 BP.  
XX  
AC AAT39013;  
XX  
DT 29-MAY-1997 (first entry)  
XX  
DE Interleukin IL-8 hybridisation probe.  
XX  
KW Cytokine; expression profile; genital wart; interleukin 12; IL-12;  
KW tumour regression; adjuvant; polymerase chain reaction; PCR;  
KW condyloma acuminata; human papilloma virus; HPV-6; HPV-11; HPV16; HPV18;  
KW anogenital; cutaneous; laryngeal; oesophageal; cancer; ss.  
XX  
OS Synthetic.  
XX  
XX WO9629091-A1.  
XX  
XX 26-SEP-1996.  
XX  
XX 22-MAR-1996; 96WO-GB000686.  
XX  
XX 22-MAR-1995; 95GB-00005784.  
XX  
XX (UYCA-) UNIV CAMBRIDGE TECH SERVICES LTD.  
XX  
XX Stanley MA, Scarpini CG;  
XX  
XX WPI; 1996-442947/44.  
XX  
XX Use of interleukin-12 to treat papilloma virus-associated lesions - esp.  
PT as a vaccine adjuvant with papilloma virus antigen for immuno:therapy of  
PT warts or tumours.  
XX  
XX Disclosure; Page 16; 32pp; English.  
XX  
XX RNA was extracted from genital lesions, reverse transcribed to produce  
CC cDNA and then the cDNA was used as the template for PCR amplification of  
CC various cytokines using the primers in AAT39013. To confirm the  
CC identity of amplified cDNA, digoxigenin- labelled probes specific for  
CC each cytokine (see AAT39013) were hybridised with Southern blots  
CC of amplified sequences. The expression profile for regressing and non-  
CC regressing warts was established and compared to cytokine expression  
CC patterns in normal cervical tissue. Results showed that interleukin 12 is  
CC barely expressed (if at all) in non-regressing warts, but is expressed in  
CC regressing warts. This suggests a central role for IL-12 in wart  
CC regression. It has been found that IL-12 can be used (especially as a  
CC vaccine adjuvant) for treating papilloma virus-associated lesions such as  
CC condyloma acuminata (anogenital warts) caused by human papilloma virus  
CC type 6 (HPV-6) and/or HPV-11 and more generally for treatment of tumours  
CC associated with HPV16 and HPV18 infection e.g. anogenital, cutaneous,  
CC laryngeal and oesophageal cancers  
XX  
SQ Sequence 20 BP; 9 A; 5 C; 1 G; 5 T; 0 U; 0 Other;  
XX

Query Match 0.9%; Score 15; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred.No. 5.1e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1068 AAAGACATACCTCAA 1082  
Db 2 AAAGACATACCTCAA 16

RESULT 392  
ADA66485  
ID ADA66485 standard; DNA; 20 BP.  
XX  
AC ADA66485;  
XX  
XX 20-NOV-2003 (first entry)  
XX  
DE Transforming growth factor-beta 3 antisense oligonucleotide, SEQ ID 44.

XX Cytostatic; antirheumatic; antiarthritic; gynecological;  
KW antiarteriosclerotic; transforming growth factor beta-3; TGF beta-3;  
KW hyperproliferative disorder; cancers; atherosclerosis;  
KW rheumatoid arthritis; preeclampsia; fibrosis; phosphorothioate; ss.  
XX Synthetic.  
XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /mod\_base= a  
FT /note= "This oligonucleotide has a phosphorothioate  
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'  
FT and 3' ends, which are 5 nucleotides in length. Also all  
FT cytidine residues are 5-methylcytidines"  
XX WO2003008544-A2.  
PN 30-JAN-2003.  
XX 12-JUL-2002; 2002WO-US022423.  
XX 14-JUL-2001; 2001US-00906158.  
XX (ISIS-) ISIS PHARM INC.  
PA Monia BP, Freier SM;  
PI WPI; 2003-229569/22.  
DR Novel antisense compound which is targeted to nucleic acid encoding  
XX transforming growth factor beta-3, and inhibits expression of TGF-beta 3,  
XX useful for treating a condition associated with TGF-beta 3, e.g. cancer.  
XX Claim 3; Page 87; 154pp; English.  
XX The present invention relates to antisense oligonucleotides (ADA66459-  
CC ADA6609), which inhibit transforming growth factor (TGF) beta-3  
CC expression. The oligonucleotides are useful for inhibiting the expression  
CC of TGF-beta3 in cells or tissues, and for treating an animal having a  
CC disease condition associated with TGF-beta3, e.g. a hyperproliferative  
CC disorder such as cancers of lung, liver, colon, oesophagus, pancreas,  
CC breast, skin or haematopoietic, atherosclerosis, rheumatoid arthritis,  
CC preeclampsia and fibrosis.  
SQ Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 5.1e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 449 TCTCCACTGAGGACA 463  
DB 2 TCTCCACTGAGGACA 16  
RESULT 393  
ID ADA66486 standard; DNA; 20 BP.  
XX ADA66486;  
XX 20-NOV-2003 (first entry)  
DT Transforming growth factor-beta 3 antisense oligonucleotide, SEQ ID 45.  
XX Cytostatic; antirheumatic; antiarthritic; gynecological;  
KW antiarteriosclerotic; transforming growth factor beta-3;  
KW hyperproliferative disorder; cancers; atherosclerosis;  
KW rheumatoid arthritis; preeclampsia; fibrosis; phosphorothioate; ss.  
XX Synthetic.

XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /mod\_base= a  
FT /note= "This oligonucleotide has a phosphorothioate  
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'  
FT and 3' ends, which are 5 nucleotides in length. Also all  
FT cytidine residues are 5-methylcytidines"  
XX WO2003008544-A2.  
PN 30-JAN-2003.  
XX 12-JUL-2002; 2002WO-US022423.  
XX 14-JUL-2001; 2001US-00906158.  
XX (ISIS-) ISIS PHARM INC.  
PA Monia BP, Freier SM;  
PI WPI; 2003-229569/22.  
DR Novel antisense compound which is targeted to nucleic acid encoding  
XX transforming growth factor beta-3, and inhibits expression of TGF-beta 3,  
XX useful for treating a condition associated with TGF-beta 3, e.g. cancer.  
XX Claim 3; Page 87; 154pp; English.  
XX The present invention relates to antisense oligonucleotides (ADA66459-  
CC ADA6609), which inhibit transforming growth factor (TGF) beta-3  
CC expression. The oligonucleotides are useful for inhibiting the expression  
CC of TGF-beta3 in cells or tissues, and for treating an animal having a  
CC disease condition associated with TGF-beta3, e.g. a hyperproliferative  
CC disorder such as cancers of lung, liver, colon, oesophagus, pancreas,  
CC breast, skin or haematopoietic, atherosclerosis, rheumatoid arthritis,  
CC preeclampsia and fibrosis.  
SQ Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 5.1e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 449 TCTCCACTGAGGACA 463  
DB 6 TCTCCACTGAGGACA 20  
RESULT 394  
ID AAQ37151 standard; DNA; 21 BP.  
XX AAQ37151;  
XX 25-MAR-2003 (revised)  
DT 23-JUN-1993 (first entry)  
XX Probe to detect interleukin-8 sequences.  
XX IL-8; alpha; cytokine synthesis inhibitor; inflammation;  
KW monokine production; Southern analysis; ss.  
XX Synthetic.  
XX WO9302693-A2.  
XX 18-FEB-1993.  
XX 06-AUG-1992; 92WO-US006378.  
XX 06-AUG-1991; 91US-00742129.

XX (SCHE ) SCHERING CORP.  
XX De Waal Malefyt R, Howard M, Hsu DH, Ishida H, Ogarra A, Spits H;  
PI Zlotnik A;  
PI WPI; 1993-076172/09.  
XX  
XX Use of interleukin-10 to modulate inflammation or T-cell mediated immune  
PT function - for treating septic and toxic shock, auto-immune diseases,  
PT tumours and infectious diseases.  
XX  
XX Example B6; Page 85; 208pp; English.  
XX  
XX Northern and Southern hybridisations were performed to determine the  
CC level at which IL-10 and IL-4 inhibit monokine production. The probe  
CC AAQ37151 was used in Southern analysis of PCR products to detect IL-8  
CC alpha coding sequences. The sequence of the probe corresponds to  
CC nucleotides 200-221 of the sequence given in Schmid et al., (1987),  
CC J. Immunol. It was found that IL-1 alpha, IL-6, TNF alpha, GM-CSF and G-  
CC CSF expression was strongly inhibited by IL-10 and IL-4 at the mRNA  
CC level. IL-1 beta and IL-8 expression was only slightly affected by IL-10.  
XX (Updated on 25-MAR-2003 to correct FN field.)  
XX  
SQ Sequence 21 BP; 9 A; 6 C; 1 G; 5 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 5.4e+02; Mismatches 0; Indels 0; Gaps 0;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1068 AAAGACATCTCCAA 1082  
Db |||||  
2 AAAGACATCTCCAA 16  
RESULT 395  
AAV08002  
ID AAV08002 standard; DNA; 21 BP.  
XX  
XX AAV08002;  
XX  
XX 20-JAN-1999 (first entry)  
XX  
XX Probe IL-8 for Interleukin-10 coding sequence.  
XX  
XX Interleukin-10; IL-10; septic shock; bacterial infection; toxic shock;  
KW infectious shock; inflammation; immune response modulation; therapy;  
KW probe; ss.  
XX  
XX Synthetic.  
XX  
XX US5933976-A.  
XX  
XX 10-NOV-1998.  
XX  
XX 24-MAR-1995; 95US-00410654.  
XX  
XX 06-AUG-1991; 91US-00742129.  
XX  
XX 06-AUG-1992; 92US-00926853.  
XX  
XX 19-APR-1994; 94US-00229854.  
XX  
XX (SCHE ) SCHERING CORP.  
XX  
XX Ishida H, Malefyt RDW, O'garra A, Spits H, Howard M, Zlotnik A;  
PI Hsu D;  
XX  
XX WPI; 1999-008644/01.  
XX  
XX Treating shock conditions from e.g. bacterial infections - comprises  
PT administering interleukin-10.  
XX  
XX Example 14; Col 42; 109pp; English.  
XX

CC This sequence represents a probe for a interleukin-10 (IL-10) coding  
CC sequence. The IL-10 protein can be used in the method of the invention  
CC for ameliorating a symptom of: (a) septic shock in a host suffering from  
CC a bacterial (preferably gram negative) infection; (b) toxic shock; (c)  
CC infectious shock; or (d) inflammation. The method comprises administering  
CC a biologically active IL-10 (preferably human) protein, analogue or a  
CC fragment (preferably full length); the treatment is used to modulate  
CC immune responses caused by the different shock syndromes, which are  
CC endotoxin or superantigen induced toxicity, or autoimmune related  
CC conditions. The conditions are side-effects of microbial infections,  
CC caused by release of their protein products, especially on anti-microbial  
CC treatment, which when cells are killed, they lyse, releasing proteins  
CC which induce the shock conditions. IL-10 inhibits TNF-alpha (tumour  
CC necrosis factor-alpha) and TNF-gamma synthesis, which as part of an  
CC immune response elicits the shock syndromes  
XX  
SQ Sequence 21 BP; 9 A; 6 C; 1 G; 5 T; 0 U; 0 Other;  
Query Match 0.9%; Score 15; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 5.4e+02; Mismatches 0; Indels 0; Gaps 0;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1068 AAAGACATCTCCAA 1082  
Db |||||  
2 AAAGACATCTCCAA 16  
RESULT 396  
AAQ43129/C  
ID AAQ43129 standard; DNA; 23 BP.  
XX  
XX AAQ43129;  
XX  
XX 25-MAR-2003 (revised)  
DT 23-SEP-1993 (first entry)  
XX  
XX HCV type 1 NS-4 sense primer 196.  
XX  
XX Non-coding region; hepatitis C virus; blood donor; type 2; type 1; HCV;  
KW NS-5; phylogeny; differentiation; NS-3; core region; type 3; PCR;  
KW amplify; polymerase chain reaction; primer; NS4; ss.  
XX  
XX Synthetic.  
XX  
XX WO9310239-A2.  
XX  
XX 27-MAY-1993.  
XX  
XX 20-NOV-1992; 92WO-GB002143.  
XX  
XX 21-NOV-1991; 91GB-00024696.  
XX  
XX 24-JUN-1992; 92GB-00013362.  
XX  
XX (COMM-) COMMON SERVICES AGENCY.  
XX  
XX Simmonds P, Chan S, Yap PL;  
XX  
XX WPI; 1993-182554/22.  
XX  
XX DNA encoding antigenic peptide(s) of new types of hepatitis C virus - for  
PT diagnosing and treating HCV infection, screening blood samples and  
PT identifying different HCV types.  
XX  
XX Disclosure; Page 27; 120pp; English.  
XX  
XX The sequences given in AAQ43112-33 are primers which were used to amplify  
CC specific regions of the hepatitis C virus (HCV) genome. Analysis of  
CC regions of the HCV genome revealed the existence of three distinct groups  
CC of HCV. Analysis of the region encompassing -255 to -62 of the 5' non  
CC coding region (NCR) (see AAQ43058-75) showed a difference of 9-14% in the  
CC nucleotide sequences between the three groups. Two of the groups  
CC identified were similar to those of HCV variants termed type 1 and 2,  
CC whilst the third appeared to represent a novel type of virus. Comparison

CC of the NS3 region (see AAR37927-30) showed a high degree of sequence  
 CC diversity with type 3 being phylo- genetically different to type 1 and 2.  
 CC The same degree different- iation was noted in the NS-5 (see AAR37923-  
 CC 26), core region (see AAR37931) and the NS4 region (see AAQ43106-111)  
 CC between type 3 and type 1 sequences. (Updated on 25-MAR-2003 to correct  
 CC PN field.)

XX  
 SQ Sequence 23 BP; 5 A; 6 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;  
 Best Local Similarity 78.3%; Pred. No. 5.9e+02;  
 Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 292 CGTCTGACGGGGCCCACTCAG 314  
 Db 23 CATTCTGAACGGCGCCCACTCG 1

RESULT 397  
 AAT41227  
 ID AAT41227 standard; DNA; 23 BP.

XX AAT41227;

AC AAT41227;

DT 03-DEC-1996 (first entry)

DE Human gene signature HUMGS01473-derived sense primer.

XX Gene signature; messenger RNA; mRNA; relative abundance; frequency;  
 KW human; cloning; mapping; non-biased library; diagnosis; detection;  
 KW cell typing; abnormal cell function; primer; PCR; amplification;  
 KW polymerase chain reaction; ss.

XX Synthetic.

XX WO9514772-A1.

XX PD 01-JUN-1995.

XX PF 11-NOV-1994; 94WO-JP001916.

XX PR 12-NOV-1993; 93JP-00355504.

XX PA (MATS/) MATSUBARA K.

XX PI (OKUB/) OKUBO K.

XX PI Matsubara K, Okubo K;

XX DR WPI; 1995-206931/27.

XX Single-stranded DNA for identifying gene signatures - isolated from 3'-  
 PT directed human cDNA library that reflects relative abundance of corresp.  
 PT mRNA in specific human tissues.

XX Example 7; Fig 8; 2245pp; Japanese.

XX Primers T41001-T41382 are derived from novel human gene signature (GS)  
 CC sequences which did not match with sequences deposited in Genbank release  
 CC 76. The GS sequences (T19001-T26837) were obtained from 3'-directed cDNA  
 CC libraries prepared from various human tissues; synthesis of cDNA was  
 CC initiated from the 3'-end of mRNA by using poly(T) as the sole primer.  
 CC Each library is constructed so as to reflect accurately the relative  
 CC abundance of different mRNAs in the particular tissue from which it was  
 CC derived. The appearance frequency of a given GS in a cDNA library can be  
 CC determined (esp. using primers and probes derived from the GS sequences)  
 CC as a means of diagnosing abnormal cell function or for recognising  
 CC different cell types. The primers T41227-8 amplify clone pm2231 which  
 CC comprises the GS HUMGS001473 (T20473), located on chromosome 22

XX Sequence 23 BP; 5 A; 5 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;  
 Best Local Similarity 78.3%; Pred. No. 5.9e+02;

Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 QY 396 TGAGTGCAGTCTCCAGTGAGAG 418  
 Db 1 TGAGTGCAGTCTACCTGTGAGAG 23

RESULT 398

AAT59709/c

ID AAT59709 standard; DNA; 23 BP.

XX AAT59709;

DT 12-MAY-1997 (first entry)

XX PCR primer CRYVIR.

XX Gene expression cassette; promoter; alcr regulator; insecticide;  
 KW CryIA(c); CryV; crystal protein; delta-endotoxin; Bacillus thuringiensis;  
 KW Lepidoptera; insect resistance; transgenic plant; crop protection;  
 KW biological control; polymerase chain reaction; PCR; primer; ss.

XX Synthetic.

XX WO9706268-A2.

PD 20-FEB-1997.

XX PF 29-JUL-1996; 96WO-GB001846.

XX PR 08-AUG-1995; 95GB-00016241.

XX PA (ZENE ) ZENECA LTD.

XX PI Jepson I, Paine JAM;

XX DR WPI; 1997-154272/14.

XX Chemically inducible expression cassette - contains inducible promoter  
 PT activated by alcr regulator in presence of alcohol or ketone inducer,  
 PT used for insecticide production in plants.

XX Example 6; Page 13; 52pp; English.

XX PCR primers (AAT59707-11) were designed to test tobacco (Nicotiana  
 CC tabacum cv. Samsun) plants for the presence of Bacillus thuringiensis-  
 CC derived CryV (see also AAT59702) and CryIa(c) (see also T597012)  
 CC sequences following Agrobacterium-mediated transformation with vectors  
 CC carrying novel constitutive or inducible gene expression cassettes  
 CC Constitutive CryIa(c) expression was confirmed using primer pairs TMV1  
 CC (AAT59705)/CRYIAR (AAT59706) and CRYIAl (AAT59707)/NOS (AAT59708),  
 CC constitutive CryV expression with TMV1/CRYVIR (AAT59709) and CRYV1  
 CC (AAT59710)/NOS, and inducible CryIa(c) expression with ALCR1  
 CC (AAT59711)/NOS

XX Sequence 23 BP; 4 A; 7 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;  
 Best Local Similarity 78.3%; Pred. No. 5.9e+02;  
 Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 515 TGGGAGAGCTGACCTCAATAGC 537  
 Db 23 TGAGCAGGTGACCACTACAGC 1

RESULT 399

AAZ60724/c

ID AAZ60724 standard; DNA; 23 BP.

XX AAZ60724;

XX 16-MAY-2000 (first entry)

XX DE PCR primer used to amplify mu-opioid receptor splice variant cDNA.  
 XX  
 KW Mu-opioid receptor; MOR-1; splice variant; morphine analgesia;  
 KW opiate-mediated ingestive response; opiate activity; analgesic;  
 KW gastrointestinal motility; respiration; immune system; endocrine system;  
 KW autonomous nervous system; peristalsis regulator; body weight;  
 KW neuroendocrine disorder; PCR primer; ss.  
 XX  
 OS Mus sp.  
 XX  
 PN W0200004046-A2.  
 XX  
 PD 27-JAN-2000.  
 XX  
 XX 15-JUL-1999; 99WO-US015974.  
 PF  
 XX 16-JUL-1998; 98US-0092980P.  
 PR  
 XX (SLOK ) SLOAN KETTERING INST CANCER RES.  
 PA  
 XX Pasternak G, Pan Y;  
 PI  
 XX WPI; 2000-182402/16.  
 DR  
 XX  
 XX New splice variants of the mu-opioid receptor, useful in screening for  
 PT selective analgesics and for regulating morphine analgesia or body  
 PT weight.  
 XX  
 XX Example 1; Page 33; 83pp; English.  
 PS  
 XX The present PCR primer was used to amplify cDNA encoding a fragment  
 CC containing exon 1c of a murine mu-opioid receptor (MOR-1) splice variant.  
 CC The specification describes 11 new exons for the MOR-1 gene, which  
 CC combine to yield 15 novel splice variants of the MOR-1 gene. These splice  
 CC variants are potential targets for modulating morphine analgesia and  
 CC opiate-mediated ingestive responses. The MOR-1 polypeptide is used to  
 CC screen compounds for opiate activity. Such compounds are potential  
 CC analgesics or more generally agents that affect gastrointestinal  
 CC motility, respiration or the immune, endocrine or autonomic nervous  
 CC systems, e.g. regulators of peristalsis. Antagonists, agonists and  
 CC ligands of MOR-1, as well as DNA vectors expressing MOR-1-encoding  
 CC nucleic acids, or sequences antisense to MOR-1 nucleic acids, are used to  
 CC regulate morphine analgesia and body weight. The level of MOR-1 or tissue  
 CC distribution of MOR-1 can be measured to diagnose MOR-1 related  
 CC pharmacological abnormalities or neuroendocrine disorders, particularly  
 CC inherited disorders. Transgenic animals with extra copies of the MOR-1  
 CC gene, or with endogenous alleles deleted, are used to study loss or gain  
 CC of function phenotypes  
 XX  
 SQ Sequence 23 BP; 4 A; 3 C; 12 G; 4 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15; DB 1; Length 23;  
 Best Local Similarity 78.3%; Pred. No. 5.9e+02;  
 Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 QY 1715 GCCTGACCATGTTCACTGCC 1737  
 DB 23 GCCTGACCATGTTCACTGCC 1  
 RESULT 400  
 AAA29067  
 ID AAA29067 standard; DNA; 23 BP.  
 XX  
 AC AAA29067;  
 XX  
 DT 12-SEP-2000 (first entry)  
 XX  
 DE Sense PCR primer for human beta-actin gene.  
 XX  
 XX osteopathic; transforming growth factor-beta; TGF-beta; binding protein;  
 KW BEER; chromosome 17q12-21; gene therapy; antisense therapy; fracture;

KW bone mineralization; primer; beta-actin; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W02000032773-A1.  
 XX  
 PD 08-JUN-2000.  
 XX  
 PF 24-NOV-1999; 99WO-US027990.  
 XX  
 PR 27-NOV-1998; 98US-0110283P.  
 XX  
 PA (DARW-) DARWIN DISCOVERY LTD.  
 XX  
 PI Brunkow ME, Galas DJ, Kovacevich B, Mulligan JT, Paepker BW;  
 PI Van Ness J, Winkler DG;  
 XX  
 XX WPI; 2000-412321/35.  
 DR  
 XX  
 XX Nucleic acids (I) encoding a transforming growth factor beta binding  
 PT protein, useful for identifying agents for treating osteopenia,  
 PT osteoporosis and fractures.  
 XX  
 PS Example 2; Page 56; 162pp; English.  
 XX  
 CC AAA29067-68 are primers for amplification of the human beta-actin gene  
 CC which was used as a control when amplifying the BEER gene to determine  
 CC its tissue-specificity. BEER is a human transforming growth factor-beta  
 CC (TGF-beta) binding protein (BEER). The BEER gene has been localized to  
 CC the chromosome 17q12-21. The cDNA and protein may be used for prevention,  
 CC treatment and diagnosis of diseases associated with inappropriate BEER  
 CC expression. For example, they may be used to treat disorders associated  
 CC with decreased TGF-beta BP expression. The cDNA or vectors may be  
 CC administered to treat diseases by rectifying mutations or deletions in a  
 CC patient's genome that affect the activity of BEER by expressing inactive  
 CC proteins or to supplement the patient's own production of BEER  
 CC polypeptides. The nucleic acids may be used for recombinant production of  
 CC BEER, gene therapy, antisense therapy, as probes for diagnostic assays  
 CC and for functional studies. BEER may be used to raise antibodies and for  
 CC identification of BEER modulators. BEER antagonists may be used to  
 CC increase bone mineral content for the treatment of disorders such as  
 CC osteopenia, osteoporosis, fractures and other disorders associated with  
 CC low mineral content  
 XX  
 SQ Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 15; DB 1; Length 23;  
 Best Local Similarity 78.3%; Pred. No. 5.9e+02;  
 Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 QY 506 AGGCTACCTGGAGAGCTGACC 528  
 DB 1 AGGCCAACCGCGAGAGATGACC 23  
 RESULT 401  
 AAA13193  
 ID AAA13193 standard; DNA; 23 BP.  
 XX  
 AC AAA13193;  
 XX  
 DT 20-JUL-2000 (first entry)  
 XX  
 DE PCR primer 944-966 used in alpha4-integrin polymorphism detection.  
 XX  
 KW PCR primer; alpha4-integrin; single nucleotide polymorphism; SNP; human;  
 KW autoimmune disease; allergy; inflammatory disease; multiple sclerosis;  
 KW rheumatoid arthritis; asthma; genetic marker; detect; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W0200017394-A1.  
 XX



```

PD 30-MAR-2000.
XX
XX 15-SEP-1999; 99WO-GB003071.
XX
XX 19-SEP-1998; 98GB-00020339.
XX
XX 10-NOV-1998; 98GB-00024506.
XX
XX (ZENE ) ZENECA LTD.
XX
XX Morten JEN;
XX
XX WPI; 2000-283615/24.
XX
XX Detecting single nucleotide polymorphisms in the alpha 4-1 integrin
XX subunit gene, useful for diagnosing e.g. autoimmune disease and for
XX screening for ligand antagonists.
XX
XX Example 4; Page 24; 38pp; English.
XX
XX This sequence represents a PCR primer used in the detection of a single
XX nucleotide polymorphism (SNP) in the human alpha4-integrin promoter
XX nucleotide sequence defined in EMBL L26059. The invention relates to the
XX diagnosis of SNPs in the human alpha4-integrin subunit gene, comprising
XX determining the sequence of the gene in at least one of 5 positions
XX within the coding region and/or 8 positions within the promoter region of
XX the gene. Diagnosis of SNPs in the human alpha4-integrin subunit gene
XX comprises determining the gene sequence in at least one of the following
XX positions: (1) 740, 2273, 2446, 3311 and 3506 in the coding region (as
XX defined in EMBL Accession No. L12002); (2) 967 in the promoter region
XX (EMBL L26509) and/or (3) 184, 238, 331, 436, 676, 1010 or 1115 in the
XX promoter region (EMBL M28841). The method is used to identify subjects
XX with (or at risk of developing) alpha4-integrin subunit ligand mediated
XX diseases, e.g. autoimmune, allergic and vascular inflammatory diseases
XX such as multiple sclerosis, rheumatoid arthritis and allergic asthma. It
XX is also used to identify patients who will benefit from treatment with
XX particular alpha4-integrin ligand antagonists, to predict likely clinical
XX responses and to determine the therapeutic dose. Nucleic acid sequences
XX that contain at least one polymorphism are used to screen for compounds
XX that modify expression of alpha4-integrin, potentially useful as
XX therapeutic agents that may target selectively one or more alleles of the
XX gene. They may also be useful as antisense therapeutics. A computer-
XX readable storage medium containing the polymorphic sequences is useful
XX for homology searches, mapping, haplotyping, genotyping and
XX pharmacogenetic, or other bioinformatic, analysis. The polymorphisms,
XX particularly those at 2273, 3311 and 1010, which are relatively common,
XX are useful as genetic markers in linkage studies
XX
XX Sequence 23 BP; 6 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15; DB 1; Length 23;
XX Best Local Similarity 78.3%; Pred. No. 5.9e+02;
XX Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
XX
XX 60 ACTGCTGAACCCAGGGGGGCG 82
XX |||||
XX 1 ACTTCTGAACCCAGAGCTGGCC 23
XX
XX RESULT 402
XX AAS04272
XX ID AAS04272 standard; DNA; 23 BP.
XX
XX AC AAS04272;
XX
XX 07-SEP-2001 (first entry)
XX
XX Human TANGO 298 TagMan probe.
XX
XX Human secreted protein; TANGO 298; chromosome 19p13; probe; bone marrow;
XX complement factor D; alternative complement pathway;
XX complement regulator deficiency; serine protease dysfunction; adipsin;
XX obesity; diabetes; blood and haematopoietic associated disorder;
XX cardiovascular disorder; inflammatory disorder; immune disorder; ss.

```

```

XX Homo sapiens.
XX Key Location/Qualifiers
XX modified_base 1
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER=FAM (6-carboxyfluorescein)"
XX modified_base 23
XX /tag= b
XX /mod_base= OTHER
XX /note= "OTHER-TAMRA"
XX
XX WO200130831-A1.
XX
XX 03-MAY-2001.
XX
XX 27-OCT-2000; 2000WO-US029797.
XX
XX 27-OCT-1999; 99US-00417796.
XX
XX 17-MAY-2000; 2000US-00572275.
XX
XX (MILL-) MILLENNIUM PHARM INC.
XX
XX Fraser CC, Hodge MR;
XX
XX WPI; 2001-300479/31.
XX
XX New nucleic acid molecule encoding type II transmembrane proteins useful
XX for treating immune related disorders.
XX
XX Example 1; Page 103; 137pp; English.
XX
XX The present sequence for human TANGO 298 TagMan probe is used to measure
XX human TANGO 298 gene expression by quantitative PCR. TANGO 298 (AAU02497)
XX is a novel secreted protein isolated from clone jyhMall18f02 from a human
XX bone marrow cDNA library. The gene for TANGO 298 maps to chromosome
XX 19p13.3. TANGO 298 shows sequence homology to human adipsin (complement
XX factor D) and may play a role in the alternative complement pathway and
XX in regulation of systemic energy balance. TANGO 298 may be used to treat
XX complement regulator deficiencies (e.g. proxymal nocturnal
XX haemoglobinuria), obesity, diabetes, blood and haematopoietic associated
XX disorders (e.g. leukaemia), monocyte associated disorders (e.g. impaired
XX phagocytosis) cardiovascular disorders (e.g. unstable angina,
XX atherosclerosis), immune disorders (e.g. arthritis, AIDS), inflammatory
XX disorders (e.g. bacterial infection), disorders associated with abnormal
XX serine protease function (e.g. Alzheimer's disease) and platelet
XX disorders (e.g. thrombosis). The invention also describes the novel
XX secreted proteins human TANGO 269 (AAU02495) and murine TANGO 269
XX (AAU02496)
XX
XX Sequence 23 BP; 6 A; 13 C; 2 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 15; DB 1; Length 23;
XX Best Local Similarity 100.0%; Pred. No. 5.9e+02;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1353 CCACGCACCCGACT 1367
XX |||||
XX 4 CCACGCACCCGACT 18
XX
XX Db
XX
XX RESULT 403
XX AAF30591
XX ID AAF30591 standard; DNA; 23 BP.
XX
XX AC AAF30591;
XX
XX 11-JUN-2001 (first entry)
XX
XX Human Factor V gene PCR primer A F5(254)-23D.
XX
XX Factor V; human; FV gene; bi-directional PCR; Bi-PASA; mutation;

```

KW zygosity; homozygote; heterozygote; genetic screening; diagnosis;  
KW venous thromboembolism; PCR primer; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
XX US6207425-B1.  
XX  
XX 27-MAR-2001.  
XX  
XX  
XX 10-SEP-1998; 98US-00150900.  
XX  
XX 11-SEP-1997; 97US-0058575P.  
XX  
XX (CITY ) CITY OF HOPE.  
XX  
XX Liu Q, Sommer SS;  
XX  
XX WPI; 2001-256850/26.  
XX  
XX

Conducting a bi-directional polymerase chain reaction amplification of specific alleles, involves amplifying DNA containing one or both of two alleles using an outer pair of primers and an inner pair of primers.

Example; Col 13; 22pp; English.

CC The present sequence is that of human Factor V (FV) gene primer A F5(254)  
CC -23D, used in bi-directional PCR amplification of specific alleles (Bi-  
CC PASA). Its name indicates an A primer for FV (F5), the 5' end beginning  
CC at base 254 of the FIX gene exon 10 and proceeding downstream for 23  
CC bases. It also has a 5' G8C2 tail. A mutation (G to A transition) at bp  
CC 266 in exon 10 of the FV gene (see AAF30549) is associated with venous  
CC thromboembolism. Detection of the mutation in the FV gene was used to  
CC validate Bi-PASA. In Bi-PASA, 2 outer primers (P and Q) and 2 inner  
CC primers (A and B) are used. A and B are each specific for different  
CC alleles. P is complementary to the antisense strand of both alleles in a  
CC region upstream of the sequence difference (mismatch). Q is complementary  
CC to the sense strand of both alleles in a region downstream of the  
CC mismatch. In heterozygotes, 3 segments are amplified: a segment of size  
CC AQ resulting from 1 allele, another of size PB resulting from the 2nd  
CC allele, and a combined segment of size PQ. In homozygotes, segment PQ and  
CC either segments AQ or PB amplify. Under optimal PCR conditions, the  
CC relative yield of DNA products obtained using the present primer was  
CC high, as indicated by a very strong DNA band on agarose gels. Bi-PASA  
CC provides a one-tube method for simultaneously differentiating homozygotes  
CC and heterozygotes. It can detect small deletions and insertions as well  
CC as single base changes. Bi-PASA is also used to perform population  
CC screening, haplotype analysis, patient screening and carrier testing. The  
CC method is rapid, reproducible, inexpensive, non-isotopic and amenable to  
CC automation  
XX

SQ Sequence 23 BP; 2 A; 8 C; 12 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;  
Best Local Similarity 78.3%; Pred. No. 5.9e+02;  
Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 242 CGCGGAGTGACCTGGAGAGGCC 264  
|||||  
DB 1 CGCGGCGGGGCCCTGGAGAGGCC 23

RESULT 404  
ABT06518

ID ABT06518 standard; DNA; 23 BP.

XX AC ABT06518;

XX 07-NOV-2002 (first entry)

DE Retinoic acid receptor beta promoter methylation specific primer #4.

XX Human; methylated gene; methylation; breast cancer; marker; WT-1;

KW cell proliferative disorder; TWIST; HOXA5; NES-1; RARbeta; cyclin D2;  
KW retinoic acid receptor beta; oestrogen receptor; Wilms' tumour;  
KW 14.3.3 sigma; HIN-1; RASSF1a; tumour suppressor gene; hypermethylation;  
XX PCR; primer; ss.  
XX  
OS Unidentified.  
XX  
XX WO200259347-A2.  
XX  
XX 01-AUG-2002.  
XX  
XX 28-JAN-2002; 2002WO-US002455.  
XX  
XX 26-JAN-2001; 2001US-00771357.  
XX  
XX (UYJO ) UNIV JOHNS HOPKINS SCHOOL MEDICINE.  
XX  
XX Sukumar S, Evron E, Dooley WC, Sacchi N, Davidson N, Packler MJ;  
XX  
XX WPI; 2002-599803/64.  
XX  
XX

Diagnosing and/or determining a predisposition to a cellular proliferative disorder of breast tissue, in particular breast cancer, by determining the state of methylation of one or more nucleic acids isolated from the subject.

Disclosure; Fig 3B; 115pp; English.

CC The present invention relates to a method of diagnosing a cellular  
CC proliferative disorder of breast tissue, which involves determining the  
CC state of methylation of one or more nucleic acids isolated from the  
CC subject, where the state of methylation of the nucleic acids as compared  
CC with a state of methylation from a subject not having the cellular  
CC proliferative disorder of breast tissue is indicative of a cellular  
CC proliferative disorder of breast tissue in the subject. The nucleic acids  
CC may be TWIST, HOXA5, NES-1, retinoic acid receptor beta (RARbeta),  
CC oestrogen receptor, cyclin D2, Wilms' tumour gene (WT-1), 14.3.3 sigma,  
CC HIN-1 or RASSF1A. The method is useful for diagnosing and/or determining  
CC a predisposition to a cellular proliferative disorder, in particular  
CC breast cancer including ductal carcinoma in situ, lobular carcinoma,  
CC colloid carcinoma, tubular carcinoma, medullary carcinoma, metaplastic  
CC carcinoma, intraductal carcinoma in situ, lobular carcinoma in situ and  
CC papillary carcinoma in situ. The present sequence is a primer used in the  
CC exemplification of the invention  
XX

SQ Sequence 23 BP; 8 A; 6 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;  
Best Local Similarity 78.3%; Pred. No. 5.9e+02;  
Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1681 AACTACATCTTCCTGCTTACTC 1703

DB 1 AATTACATTTCCAACTTACTC 23

RESULT 405

ABT06660

ID ABT06660 standard; DNA; 23 BP.

XX AC ABT06660;

XX 07-NOV-2002 (first entry)

XX Nucleic acid detection and discrimination related oligo SEQ ID No 3.

XX Hybridising; quantification; detection; synthesis; amplification;  
XX oligonucleotide; ds.

XX Unidentified.

XX WO200257479-A2.

XX

PD 25-JUL-2002.  
XX  
PF 27-DEC-2001; 2001WO-US050460.  
XX  
PR 27-DEC-2000; 2000US-00748146.  
PR 23-OCT-2001; 2001US-0330468P.  
XX  
XX (INVI-) INVITROGEN CORP.  
XX  
XX Nazarenko I, Rashtchian A, Solus J, Pires RM, Darfler M;  
PI Gebeyehu G, Astatke M;  
XX WPI; 2002-627370/67.  
XX  
XX Composition comprising nucleic acid molecules and a oligonucleotide  
PT capable of hybridizing with a portion of nucleic acid, and comprises a  
PT modified nucleotide at or near the 3'-terminal nucleotide.  
XX  
XX Example 1; Page 115; 307pp; English.  
XX  
XX The invention relates to a composition comprising one or more nucleic  
CC acid molecules and at least one oligonucleotide, where at least a portion  
CC of the oligonucleotide is capable of hybridizing with at least a portion  
CC of the nucleic acid molecule and where the oligonucleotide comprises a  
CC modified nucleotide at or near the 3'-terminal nucleotide. The various  
CC analogue oligonucleotides are useful for quantification or detection of  
CC one or more target nucleic acid molecules in a sample during nucleic acid  
CC synthesis or amplification. The analogues are also useful for determining  
CC the presence or absence of one or more particular nucleotides at a  
CC specific position or positions in a target nucleic acid molecule. The  
CC analogue oligonucleotides can also be useful for synthesizing or  
CC amplifying one or more nucleic acid molecules, by mixing one or more  
CC nucleic acid templates or targets with the analogue oligonucleotides, and  
CC incubating the mixture to synthesize or amplify one or more nucleic acid  
CC molecules complementary to all or a portion of the templates or targets.  
CC This polynucleotide sequence represents a nucleic acid detection and  
CC discrimination related oligonucleotide of the invention  
XX  
XX Sequence 23 BP; 7 A; 6 C; 7 G; 3 T; 0 U; 0 Other;  
XX  
Query Match 0.9%; Score 15; DB 1; Length 23;  
Best Local Similarity 78.3%; Pred. No. 5.9e+02;  
Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
XX  
QY 945 GGCTTACTGCGCACCAGGAGG 967  
DB 1 GGCTTACAGCCACCATGAGG 23  
XX  
RESULT 406  
ID ACF05961 standard; DNA; 23 BP.  
XX ACF05961;  
XX ACF05961;  
XX  
XX 04-DEC-2003 (first entry)  
XX  
XX Beta-actin upstream PCR primer.  
XX  
XX Beta-actin; bone morphogenic protein; human; glaucoma; diagnosis;  
XX therapy; ophthalmological; PCR; primer; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO2003055443-A2.  
XX  
XX 10-JUL-2003.  
XX  
XX 31-OCT-2002; 2002WO-US035251.  
XX  
XX 31-OCT-2001; 2001US-0334852P.  
XX  
XX (ALCO-) ALCON INC.  
XX

PA (UYNT-) UNIV NORTH TEXAS HEALTH SCI CENT.  
XX  
XX Clark AF, Wordinger RJ;  
XX WPI; 2003-559253/52.  
XX  
XX Diagnosing glaucoma in a sample comprises detecting altered expression of  
PT bone morphogenic proteins in sample from a cell or bodily fluid.  
XX  
XX Example 1; Page 25; 55pp; English.  
XX  
XX The present sequence is an upstream primer for the PCR amplification of  
CC the human beta-actin gene. RT-PCR was used to examine the expression of  
CC bone morphogenic protein (BMP) family genes in human trabecular meshwork  
CC and optic nerve head tissues. The invention provides methods for  
CC diagnosing glaucoma based on altered expression of BMPs. Also provided  
CC are methods for treating glaucoma and for identifying agents suitable for  
CC treatment of glaucoma  
XX  
XX Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;  
XX  
Query Match 0.9%; Score 15; DB 1; Length 23;  
Best Local Similarity 78.3%; Pred. No. 5.9e+02;  
Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
XX  
QY 506 AGGCTTACTGCGAGAGCTGACC 528  
DB 1 AGGCTTACTGCGAGAGCTGACC 23  
XX  
RESULT 407  
ID ADD41388 standard; DNA; 23 BP.  
XX ADD41388;  
XX  
XX 15-JAN-2004 (first entry)  
XX  
XX Human DNA RT-PCR primer #11.  
XX  
XX Human; pulmonary fibrosis; renin-angiotensin-aldosterone;  
XX caspase enzyme inhibitor; endonuclease inhibitor;  
XX pulmonary epithelial cell apoptosis;  
XX non-thiol angiotensin activating enzyme inhibitor;  
XX non-thiol ACE inhibitor; sarcoidosis; silicosis; asbestosis;  
XX pneumoconiosis; hypersensitivity pneumonitis;  
XX drug-induced interstitial lung disease; IID; vasculitides;  
XX histiocytosis X; Goodpasture's syndrome; chronic eosinophilic pneumonia;  
XX arrhythmia; RT-PCR; primer; ss; reverse transcriptase.  
XX  
XX Homo sapiens.  
XX  
XX US2003113330-A1.  
XX  
XX 19-JUN-2003.  
XX  
XX 06-JAN-2003; 2003US-00337169.  
XX  
XX 08-NOV-1999; 99US-0164052P.  
XX 08-NOV-2000; 2000US-00708742.  
XX  
XX (UHAL/) UHAL B D.  
XX  
XX Uhal BD;  
XX  
XX WPI; 2003-810878/76.  
XX  
XX Treating pulmonary fibrosis by administering antagonist of renin-  
PT angiotensin-aldosterone system e.g. non-thiol angiotensin activating  
PT enzyme inhibitor, caspase enzyme or endonuclease inhibitor that inhibits  
PT apoptosis.  
XX  
XX Example 5; SEQ ID NO 17; 32pp; English.

XX The invention relates to a method for treating pulmonary fibrosis  
CC involving administering to a subject at risk of or suffering from  
CC pulmonary fibrosis, an amount of an antagonist of a renin-angiotensin-  
CC aldosterone system e.g., a caspase enzyme inhibitor or an endonuclease  
CC inhibitor that inhibits pulmonary epithelial cell apoptosis, where the  
CC antagonist is a non-thiol angiotensin activating enzyme (ACE) inhibitor.  
CC The method is useful for treating a subject suffering from pulmonary  
CC fibrosis such as idiopathic pulmonary fibrosis, sarcoidosis, familial  
CC pulmonary fibrosis, silicosis, asbestosis, coal worker's pneumoconiosis,  
CC carbon pneumoconiosis, hypersensitivity pneumonitis, pulmonary fibrosis  
CC caused by inhalation of inorganic dust, pulmonary fibrosis caused by an  
CC infectious agent, pulmonary fibrosis caused by inhalation of noxious  
CC gases, aerosols, chemical dusts, fumes or vapours, or drug-induced  
CC interstitial lung disease (ILD). The method is also useful in treating a  
CC subject at risk of pulmonary fibrosis and undergoing radiation therapy or  
CC chemotherapy and in treating pulmonary fibrosis associated with collagen-  
CC vascular disorders or vasculitides, histiocytosis X, Goodpasture's  
CC syndrome, chronic eosinophilic pneumonia, idiopathic pulmonary  
CC haemosiderosis or arrhythmia. This sequence represents a reverse  
CC transcriptase PCR (RT-PCR) primer used in the method of the invention.  
XX  
SQ Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.9%; Score 15; DB 1; Length 23;  
Best Local Similarity 78.3%; Pred. No. 5.9e+02;  
Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 506 AGGGCTACTCTGAGAAAGCTGACC 528  
DB 1 AGGCCAACCCGAGAGATGACC 23

RESULT 408  
AAA86682  
ID AAA86682 standard; DNA; 18 BP.

XX AAA86682;  
XX  
XX 04-DEC-2000 (first entry)  
XX  
XX Cdc 2 kinase hammerhead ribozyme recognitoins site #113.  
XX  
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX Mammalia.

XX WO200032765-A2.  
XX  
XX 08-JUN-2000.  
XX  
XX 06-DEC-1999; 99WO-US028772.  
XX  
XX 04-DEC-1998; 98US-0110954P.  
XX (IMMU-) IMMUSOL INC.  
XX  
XX Tritz R, Welch PJ, Barber JR, Robbins JM;  
XX WPI; 2000-412314/35.  
XX  
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
XX RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
XX PCNA and Cyclin B1.  
XX  
XX Example 1; Page 21; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme,  
XX designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
XX other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
XX Representative examples of ribozyme recognition sites are given in  
XX AAA82415 to AAA86787. The ribozyme of the invention is useful for  
XX inhibiting restenosis by introduction of the ribozyme into cells. The

CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX  
SQ Sequence 18 BP; 1 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 5e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1030 GCTGACTTTGGCCTGGCC 1047  
DB 1 GCTGATTTGGCCTTGC 18

RESULT 409  
AAA86680  
ID AAA86680 standard; DNA; 18 BP.  
XX  
XX AAA86680;  
XX AC  
XX 04-DEC-2000 (first entry)  
XX  
XX Cdc 2 kinase hammerhead ribozyme recognitoins site #111.

XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX Mammalia.

XX WO200032765-A2.  
XX  
XX 08-JUN-2000.  
XX

XX 06-DEC-1999; 99WO-US028772.  
XX  
XX 04-DEC-1998; 98US-0110954P.  
XX

XX (IMMU-) IMMUSOL INC.

XX Tritz R, Welch PJ, Barber JR, Robbins JM;

XX WPI; 2000-412314/35.

XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
XX RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
XX PCNA and Cyclin B1.

XX Example 1; Page 21; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme,  
XX designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
XX other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
XX Representative examples of ribozyme recognition sites are given in  
XX AAA82415 to AAA86787. The ribozyme of the invention is useful for  
XX inhibiting restenosis by introduction of the ribozyme into cells. The  
XX ribozyme is resistant to endonuclease activity and hence is efficient in  
XX restenosis treatment

XX Sequence 18 BP; 1 A; 3 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 5e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1028 TGGCTGACTTTGGCCTGG 1045  
DB 1 TGGCTGATTTGGCCTTG 18

RESULT 410  
AAA86681  
ID AAA86681 standard; DNA; 18 BP.  
XX  
XX AAA86681;

```

XX 04-DEC-2000 (first entry)
XX Cdc 2 Kinase hammerhead ribozyme recognition site #112.
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX Mammalia.
XX WO200032765-A2.
XX 08-JUN-2000.
XX 06-DEC-1999; 99WO-US028772.
XX 04-DEC-1998; 98US-0110954P.
XX (IMMU-) IMMUSOL INC.
XX Tritz R, Welch PJ, Barber JR, Robbins JW;
XX WPI; 2000-412314/35.
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
XX RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
XX PCNA and Cyclin B1.
XX Example 1; Page 21; 109pp; English.
XX The present invention relates to a hairpin or hammerhead ribozyme,
XX designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
XX other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
XX Representative examples of ribozyme recognition sites are given in
XX AA82415 to AA86787. The ribozyme of the invention is useful for
XX inhibiting restenosis by introduction of the ribozyme into cells. The
XX ribozyme is resistant to endonuclease activity and hence is efficient in
XX restenosis treatment
XX Sequence 18 BP; 1 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 5e+02; 2; Indels 0; Gaps 0;
Matches 16; Conservative 0; Mismatches 0;
QY 1029 GCGTGACTTGGCCTGGC 1046
DB 1 GCGTGATTGGCCTGTC 18
RESULT 411
AAZ77171
ID AAZ77171 standard; DNA; 18 BP.
AC AAZ77171;
XX
XX 10-SEP-2001 (first entry)
XX Human biallelic marker downstream amplification primer SEQ ID NO:11527.
XX Human genome; biallelic marker; high density disequilibrium map;
XX genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX haplotyping; hybridisation; identification; characterisation;
XX amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
XX Homo sapiens.
XX WO9954500-A2.
XX 28-OCT-1999.
XX 21-APR-1999; 99WO-IB000822.
XX

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PR 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX (GEST ) GENSET.
XX Cohen D, Blumenfeld M, Chumakov I;
XX WPI; 2000-013267/01.
XX Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX Claim 9; Page 2688; 2745pp; English.
XX AA265654 to AA269578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AA269579 to AA277440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the invention
XX have a variety of uses; they can be used for high density mapping of the
XX human genome, and in complex association studies and haplotyping studies
XX which are useful in determining the genetic basis for disease states.
XX Compositions and methods of the invention can also be useful for the
XX identification of the targets for the development of pharmaceutical
XX agents and diagnostic methods, as well as the characterisation of the
XX differential efficacious responses to and side effects from
XX pharmaceutical agents acting on a disease as well as other treatment.
XX N.B. the SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX 3367, are not actually given a sequence in the Sequence Listing from the
XX present invention
SQ Sequence 18 BP; 6 A; 7 C; 1 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 5e+02; 2; Indels 0; Gaps 0;
Matches 16; Conservative 0; Mismatches 0;
QY 1679 CCAACTACATCTTCCCTG 1696
DB 1 CCAACTACATAATCCCTG 18
RESULT 412
AAH61848
ID AAH61848 standard; DNA; 18 BP.
XX AAH61848;
XX
XX 10-SEP-2001 (first entry)
XX Cdc 2 Kinase hammerhead ribozyme recognition site SEQ ID NO:4272.
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulnery;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; reductase; scarring; cystostatic;
XX antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
XX antickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.
XX Homo sapiens.
XX Synthetic.
XX WO200130362-A2.
XX 03-MAY-2001.
XX 26-OCT-2000; 2000WO-US029500.
XX 26-OCT-1999; 99US-0161532P.
XX

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PA (IMMU-) IMMUSOL INC.
PI Robbins JM, Tritz R;
XX
XX
DR WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Disclosure; Page 385; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
XX Sequence 18 BP; 1 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 5e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1030 GCTGACTTTGGCCTGGCC 1047
Db 1 GCTGACTTTGGCCTGGCC 18

RESULT 413
AAH61847
ID AAH61847 standard; DNA; 18 BP.
XX
XX AAH61847;
XX
XX 10-SEP-2001 (first entry)
XX
XX Cdc 2 kinase hammerhead ribozyme recognition site SEQ ID NO:4271.
XX
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulnary;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
XX antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX WO200130362-A2.
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX

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BR 26-OCT-1999; 99US-0161532P.
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
XX
XX WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Disclosure; Page 385; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
XX Sequence 18 BP; 1 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 5e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1029 GCTGACTTTGGCCTGGC 1046
Db 1 GCTGACTTTGGCCTGGC 18

RESULT 414
AAH61846
ID AAH61846 standard; DNA; 18 BP.
XX
XX AAH61846;
XX
XX 10-SEP-2001 (first entry)
XX
XX Cdc 2 kinase hammerhead ribozyme recognition site SEQ ID NO:4270.
XX
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulnary;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
XX antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX WO200130362-A2.
XX
XX 03-MAY-2001.
XX
XX

```

PF 26-OCT-2000; 2000WO-US029500.  
XX  
PR 26-OCT-1999; 99US-0161532P.  
XX  
PA (IMMU-) IMMUSOL INC.  
XX  
PI Robbins JW, Tritz R;  
XX  
DR WPI; 2001-300427/31.  
XX  
XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
PT that cleave RNA encoding cytokines involved in inflammation, matrix  
PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
XX  
PS Disclosure; Page 385; 408pp; English.  
XX  
CC The present invention describes a method for treating a proliferative  
CC skin or eye disease and scarring. The method involves administering a  
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
CC dependent kinase, growth factor or a reductase, or administering a  
CC nucleic acid molecule (II) comprising a promoter operably linked to a  
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,  
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antiskinning,  
CC ophthalmological, vulvular, keratolytic and virucide activities, and  
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic  
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention  
XX  
SQ Sequence 18 BP; 1 A; 3 C; 6 G; 8 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 5e+02; Mismatches 0; Gaps 0;  
Matches 16; Conservative 0; Indels 2; Indels 0; Gaps 0;  
  
QY 1028 TGGCTGACTTTGGGCTGG 1045  
DB 1 TGGCTGATTTGGGCTTG 18  
  
RESULT 415  
ACA60586/c  
ID ACA60586 standard; DNA; 18 BP.  
XX  
AC ACA60586;  
XX  
DT 11-JUN-2003 (first entry)  
XX  
DE Antisense inhibition of human cyclin D2 related oligonucleotide #23.  
XX  
KW Human; cyclin D2; diagnostic; therapeutic; prophylaxis;  
KW cyclin 2 inhibition; ss.  
XX  
OS Homo sapiens.  
XX  
PN US6492173-B1.  
XX  
PD 10-DEC-2002.  
XX  
PF 01-AUG-2001; 2001US-00920760.  
XX  
PR 01-AUG-2001; 2001US-00920760.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Cowse LM;  
  
Query Match 0.8%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 5e+02; Mismatches 0; Gaps 0;  
Matches 16; Conservative 0; Indels 2; Indels 0; Gaps 0;  
  
QY 1028 TGGCTGACTTTGGGCTGG 1045  
DB 1 TGGCTGATTTGGGCTTG 18  
  
RESULT 415  
ACA60586/c  
ID ACA60586 standard; DNA; 18 BP.  
XX  
AC ACA60586;  
XX  
DT 11-JUN-2003 (first entry)  
XX  
DE Antisense inhibition of human cyclin D2 related oligonucleotide #23.  
XX  
KW Human; cyclin D2; diagnostic; therapeutic; prophylaxis;  
KW cyclin 2 inhibition; ss.  
XX  
OS Homo sapiens.  
XX  
PN US6492173-B1.  
XX  
PD 10-DEC-2002.  
XX  
PF 01-AUG-2001; 2001US-00920760.  
XX  
PR 01-AUG-2001; 2001US-00920760.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Cowse LM;  
  
Query Match 0.8%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 5e+02; Mismatches 0; Gaps 0;  
Matches 16; Conservative 0; Indels 2; Indels 0; Gaps 0;  
  
QY 992 AGAACCTGCTCATCAACG 1009  
DB 18 AGAACCTGCTCATCAACG 1  
  
RESULT 416  
ADE34621/c  
ID ADE34621 standard; DNA; 18 BP.  
XX  
AC ADE34621;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Human guanylate binding protein reverse primer #SEQ ID 14.  
XX  
KW Gene therapy; vaccine; rheumatoid arthritis; gene modulation; PCR;  
KW primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003048323-A2.  
XX  
PD 12-JUN-2003.  
XX  
PF 03-DEC-2002; 2002WO-US038461.  
XX  
PR 03-DEC-2001; 2001US-0337429P.  
XX  
PA (BRIM) BRISTOL-MYERS SQUIBB CO.  
PA (CARM) CARMAN J.  
PA (NADL) NADLER S G.  
PA (BOWE) BOWEN M.  
PA (NEUB) NEUBAUER M.  
PA (LUPP) LU P.  
XX  
PI Carman J, Nadler SG, Bowen M, Neubauer M, Lu P;  
XX  
DR WPI; 2003-513754/48.  
XX  
XX Identifying a compound that modulates the activity of rheumatoid  
PT arthritis-associated gene or protein by determining whether the test  
PT compound modulates the activity of the gene or protein expressed in the  
PT cell contacted with the compound.  
XX  
PS Disclosure; Page 24; 170pp; English.  
XX  
CC The invention relates to an assay for identifying a compound that  
CC modulates the activity of a gene or protein associated with rheumatoid  
CC arthritis. The method of the invention comprises providing a cell

CC expressing a gene or protein associated with rheumatoid arthritis,  
CC contacting the cell with a test compound, and determining whether the  
CC test compound modulates the activity of the gene or protein. The method  
CC of the invention is useful for preparing a composition for treating  
CC rheumatoid arthritis. The current sequence represents a PCR primer used  
CC in the isolation of rheumatoid arthritis associated genes.  
XX  
SQ Sequence 18 BP; 5 A; 6 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 5e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1207 TTTCGGGCTCCACGGTG 1224  
Db 18 TCTCTGGGCTCCACGGTG 1

## RESULT 417

AAA82999  
ID AAA82999 standard; DNA; 19 BP.

XX  
AC AAA82999;  
DT 04-DEC-2000 (first entry)  
XX  
DE cdk6 ribozyme binding site #59.  
XX  
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX Mammalia.  
OS  
XX WO200032765-A2.  
PN  
PD 08-JUN-2000.  
PF 06-DEC-1999; 99WO-US028772.  
XX  
PR 04-DEC-1998; 98US-0110954P.  
XX  
PA (IMMU-) IMMUSOL INC.  
XX  
PI Tritz R, Welch PJ, Barber JR, Robbins JM;  
XX  
DR WPI; 2000-412314/35.  
XX  
PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.  
XX  
PS Disclosure; Page 55; 109pp; English.

CC The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX  
SQ Sequence 19 BP; 1 A; 8 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 5.3e-02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1030 GCTGACTTGGCTGGCC 1047  
Db 2 GCTGACTTGGCTGGCC 19

## RESULT 418

AAA82666  
ID AAA82666 standard; DNA; 19 BP.

XX  
AC AAA82666;  
DT 04-DEC-2000 (first entry)  
XX  
DE Cyclin D1 ribozyme binding site #33.  
XX  
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX Mammalia.  
OS  
XX WO200032765-A2.  
PN  
PD 08-JUN-2000.  
PF 06-DEC-1999; 99WO-US028772.  
XX

AAA82619  
ID AAA82619 standard; DNA; 19 BP.

XX  
AC AAA82619;  
DT 04-DEC-2000 (first entry)  
XX  
DE cdk2 ribozyme binding site #56.  
XX  
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX Mammalia.  
OS  
XX WO200032765-A2.  
PN  
PD 08-JUN-2000.  
PF 06-DEC-1999; 99WO-US028772.  
XX  
PR 04-DEC-1998; 98US-0110954P.  
XX  
PA (IMMU-) IMMUSOL INC.  
XX  
PI Tritz R, Welch PJ, Barber JR, Robbins JM;  
XX  
DR WPI; 2000-412314/35.  
XX  
PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.  
XX  
PS Disclosure; Page 49; 109pp; English.

CC The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX  
SQ Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 5.3e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 927 CCAGCTGCTCCGTGGCCT 944  
Db 1 CCAGCTGCTCCAGGGCCT 18

## RESULT 419

AAA84266  
ID AAA84266 standard; DNA; 19 BP.

XX  
AC AAA84266;  
DT 04-DEC-2000 (first entry)  
XX  
DE Cyclin D1 ribozyme binding site #33.  
XX  
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX Mammalia.  
OS  
XX WO200032765-A2.  
PN  
PD 08-JUN-2000.  
PF 06-DEC-1999; 99WO-US028772.  
XX



PR 04-DEC-1998; 98US-0110954P.  
XX (IMMU-) IMMUSOL INC.  
XX  
XX Tritz R, Welch PJ, Barber JR, Robbins JM;  
XX WPI; 2000-412314/35.  
XX  
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.  
XX  
XX Disclosure; Page 74; 109pp; English.  
XX  
XX The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX  
XX Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 5.3e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 272 GTGCTGCTCTCTGGGAAC 289  
Db 2 GAGCTGCTCTCTGGGAAC 19  
RESULT 420  
AAH58161  
ID AAH58161 standard; DNA; 19 BP.  
XX  
XX AAH58161;  
XX  
XX 10-SEP-2001 (first entry)  
XX  
XX Cell-cycle dependent kinase cdk6 ribozyme binding site SEQ ID NO:585.  
XX  
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
KW recognition site; target; ribozyme binding site; eye disease; vulnery;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;  
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.  
XX  
XX Homo sapiens.  
OS Synthetic.  
XX  
XX WO200130362-A2.  
XX  
XX 03-MAY-2001.  
XX  
XX 26-OCT-2000; 2000WO-US029500.  
XX  
XX 26-OCT-1999; 99US-0161532P.  
XX  
XX (IMMU-) IMMUSOL INC.  
XX  
XX Robbins JM, Tritz R;  
XX WPI; 2001-300427/31.  
XX  
XX Treating proliferative skin or eye diseases and scarring, using ribozymes

PT that cleave RNA encoding cytokines involved in inflammation, matrix  
XX metalloproteinases, growth factors and cell-cycle dependent kinases.  
XX  
XX Example 1; Page 114; 408pp; English.  
XX  
XX The present invention describes a method for treating a proliferative  
CC skin or eye disease and scarring. The method involves administering a  
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
CC dependent kinase, growth factor or a reductase, or administering a  
CC nucleic acid molecule (II) comprising a promoter operably linked to a  
CC nucleic acid segment encoding (I). (I) can have antiproliferative,  
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
CC ophthalmological, vulnery, keratolytic and virucide activities, and  
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic  
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retnopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention  
XX  
XX Sequence 19 BP; 1 A; 8 C; 5 G; 5 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 5.3e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 1030 GGTGACTTTGGCTGGCC 1047  
Db 2 GCTGACTTGGCTTGGCC 19  
RESULT 421  
AAH59428  
ID AAH59428 standard; DNA; 19 BP.  
XX  
XX AAH59428;  
XX  
XX 10-SEP-2001 (first entry)  
XX  
XX Cyclin D1 ribozyme binding site SEQ ID NO:1852.  
XX  
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
KW recognition site; target; ribozyme binding site; eye disease; vulnery;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;  
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.  
XX  
XX Homo sapiens.  
OS Synthetic.  
XX  
XX WO200130362-A2.  
XX  
XX 03-MAY-2001.  
XX  
XX 26-OCT-2000; 2000WO-US029500.  
XX  
XX 26-OCT-1999; 99US-0161532P.  
XX  
XX (IMMU-) IMMUSOL INC.  
XX  
XX Robbins JM, Tritz R;  
XX WPI; 2001-300427/31.  
XX  
XX Treating proliferative skin or eye diseases and scarring, using ribozymes

XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
PT that cleave RNA encoding cytokines involved in inflammation, matrix  
PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
XX Example 1; Page 206; 408pp; English.  
XX The present invention describes a method for treating a proliferative  
CC skin or eye disease and scarring. The method involves administering a  
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
CC dependent kinase, growth factor or a reductase, or administering a  
CC nucleic acid molecule (II) comprising a promoter operably linked to a  
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
CC ophthalmological, vulnary, keratolytic and virucide activities, and  
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic  
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention  
XX Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 5.3e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 272 GTGCTGCTCCTGGGGAAC 289  
D5 2 GAGCTGCTCCTGGGGAAC 19  
RESULT 422  
AAH57781  
ID AAH57781 standard; DNA; 19 BP.  
AC AAH57781;  
XX 10-SEP-2001 (first entry)  
XX Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:205.  
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
KW recognition site; target; ribozyme binding site; eye disease; vulnary;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;  
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.  
XX Homo sapiens.  
OS Synthetic.  
XX WO200130362-A2.  
XX 03-MAY-2001.  
XX 26-OCT-2000; 2000WO-US029500.  
XX 26-OCT-1999; 98US-0161532P.  
XX (IMMU-) IMMUSOL INC.  
XX Robbins JM, Tritz R;  
PI

XX WPI; 2001-300427/31.  
XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
XX that cleave RNA encoding cytokines involved in inflammation, matrix  
XX metalloproteinases, growth factors and cell-cycle dependent kinases.  
XX Example 1; Page 86; 408pp; English.  
XX The present invention describes a method for treating a proliferative  
CC skin or eye disease and scarring. The method involves administering a  
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
CC dependent kinase, growth factor or a reductase, or administering a  
CC nucleic acid molecule (II) comprising a promoter operably linked to a  
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
CC ophthalmological, vulnary, keratolytic and virucide activities, and  
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic  
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention  
XX Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 5.3e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 927 CCAGCTGCTCCTGGGCT 944  
D5 1 CCAGCTGCTCCTGGGCT 18  
RESULT 423  
AAV12449/C  
ID AAV12449 standard; DNA; 20 BP.  
AC AAV12449;  
XX 14-MAY-1998 (first entry)  
XX Growth hormone receptor PCR primer P3.  
XX Growth hormone receptor; GHR; human; insulin like growth factor-1;  
KW partial growth hormone insensitivity syndrome; IGF-1; short stature;  
KW PCR primer; ss.  
XX Synthetic.  
OS Homo sapiens.  
XX WO9741887-A1.  
XX 13-NOV-1997.  
XX 18-APR-1997; 97WO-US006652.  
XX 03-MAY-1996; 96US-00643212.  
XX (GETH ) GENENTECH INC.  
XX Attie KM, Carlsson LMS, Gesundheit N, Goddard A;  
XX WPI; 1997-558693/51.  
XX Treatment of partial growth hormone insensitivity syndrome - with growth  
XX hormone or insulin-like growth factor.  
PT

XX Disclosure; Page 7; 133pp; English.

XX The present sequence represents a PCR primer for growth hormone receptor

CC (GHR) used in an example of the present invention. The present invention

CC describes new methods for increasing the growth rate of a human patient

CC having partial growth hormone insensitivity syndrome (GHIS) or a non-

CC Growth Hormone (GH)-deficient short stature but not Laron Syndrome; the

CC patient has a height of at least -2 standard deviations (SD) below normal

CC for age and sex, has a serum level of high-affinity GH-binding protein of

CC at least 2 SD below normal, has serum levels of insulin-like growth

CC factor (IGF)-I below normal mean levels and has a mean level or maximum

CC stimulated serum level of GH that is at least normal, and growth rate is

CC increased by administering an effective amount of GH and/or IGF-I. The

CC methods are used to treat people with short stature including familial

CC short stature, constitutional delay or growth or idiopathic short

CC stature. The patient especially has a heterologous intra- or

CC extracellular GH receptor gene defect

XX

SQ Sequence 20 BP; 8 A; 1 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 5.6e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1237 CACTTCATCTTCCTATC 1254

DB 19 CACTTCATCTTCCTATC 2

RESULT 424

AAV52681/c

ID AAV52681 standard; DNA; 20 BP.

XX

AC AAV52681;

DT 21-DEC-1998 (first entry)

XX

DE Hepatocyte nuclear factor 4 alpha gene exon 8 forward PCR primer.

XX

KW Hepatocyte nuclear factor 4 alpha; HNF-4 alpha; MODY1; human;

KW transcription factor; maturity onset diabetes of the young; TCF14;

KW diabetes; NIDDM; diagnosis; therapy; PCR; primer; ss.

XX

OS Synthetic.

OS Homo sapiens.

XX

FN WO9811254-A1.

XX

PD 19-MAR-1998.

XX

PF 10-SEP-1997; 97WO-US016037.

XX

PR 10-SEP-1996; 96US-0025719P.

PR 02-OCT-1996; 96US-0028056P.

PR 30-OCT-1996; 96US-0029679P.

XX

PA (ARCH-) ARCH DEV CORP.

XX

PI Bell GI, Yamagata K, Oda N, Kaisaki PJ, Furuta H, Menzel S;

PI Horikawa Y;

XX

DR WPI; 1998-271667/24.

XX

PT Isolated nucleic acid encoding hepatocyte nuclear factor 1-alpha and 1-

PT beta - useful for detecting susceptibility for non-insulin dependent

PT diabetes, especially maturity-onset diabetes of the young.

XX

PS Example 3; Page 112; 363pp; English.

XX

CC This is a forward PCR primer designed for use with a reverse primer (see

CC AAV52682) in the PCR amplification of exon 8 and the flanking introns

CC (see AAV52656) of the human hepatocyte nuclear factor-4 alpha (HNF-4

CC alpha) gene (see AAV52687). Mutations of the HNF-4 alpha gene have been

CC identified by amplifying (see AAV52655-86) and sequencing the appropriate

CC exon. The invention concerns the identification of genes responsible for

CC non-insulin dependent diabetes mellitus (NIDDM) for use in diagnostics

CC and therapeutics. It demonstrates that the MODY1 (maturity-onset diabetes

CC of the young) locus is the HNF-4 alpha gene. Analysis of mutations in the

CC HNF-4 alpha gene can be diagnostic for diabetes

XX

SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 5.6e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 691 CTTGTGTCACCTCAAGGAG 708

DB 18 CTTGTGTCACCTCAAGGAG 1

RESULT 425

AAZ01841

ID AAZ01841 standard; DNA; 20 BP.

XX

AC AAZ01841;

XX

DT 07-OCT-1999 (first entry)

XX

DE PCR primer used to amplify an ORF of Chlamydia trachomatis.

XX

KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;

KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;

KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;

XX bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.

OS Synthetic.

OS Chlamydia trachomatis.

XX

FN WO9928475-A2.

XX

PD 10-JUN-1999.

XX

PF 27-NOV-1998; 98WO-1B001939.

XX

PR 28-NOV-1997; 97FR-00015041.

PR 17-DEC-1997; 97FR-00016034.

PR 04-NOV-1998; 98US-0107077P.

XX

PA (GEST ) GENSET.

XX

PI Griffais R;

XX

DR WPI; 1999-371125/31.

XX

FT Genome sequence of Chlamydia trachomatis.

XX

PS Disclosure; Page 1476; 1755pp; English.

XX

CC PCR primers AAZ01426-206209 were used to amplify open reading frames

CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs

CC encode Polypeptides (see AAY36754-37949) which can be used as vaccines

CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also

CC be used to control growth of the microorganism. Chlamydia trachomatis is

CC responsible for a large number of diseases, e.g. eye diseases such as

CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion

CC conjunctivitis; genital diseases such as nongonococcal urethritis;

CC epididymitis, cervicitis, salpingitis, perihhepatitis, bartholinitis;

CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.

CC The polypeptides of the invention may be of use in treating these

CC diseases

XX

SQ Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 5.6e+02; Mismatches 2; Indels 0; Gaps 0;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 856 AAGGACCTGAAGCAGTAC 873  
 |||||  
 Db 3 AAGGACCTGAAGAAGTTC 20

RESULT 426  
 AAX79768/c  
 ID AAX79768 standard; DNA; 20 BP.  
 XX AC AAX79768;  
 XX DT 17-AUG-1999 (first entry)  
 XX DE PCR primer H11791 for mitochondrial DNA analysis.  
 XX KW PCR primer; human; mitochondrial DNA; genetic diagnosis;  
 KW adult disease contraction; ss.  
 XX OS Synthetic.  
 OS Homo sapiens.  
 XX JP11113597-A.  
 XX PN 27-APR-1999.  
 XX PF 13-OCT-1997; 97JP-00279127.  
 XX PR 13-OCT-1997; 97JP-00279127.  
 XX PA (TANA/) TANAKA M.  
 XX DR WPI; 1999-320841/27.  
 XX KW Genetic diagnosis using human mitochondrial DNA - comprises detecting  
 PT base replacements.  
 PT Example 2; Page 6; 15pp; Japanese.  
 XX CC This sequence represents a PCR primer that can be used in the method of  
 CC the invention. The method is for genetic diagnosis using human  
 CC mitochondrial DNA where there is at least one base replacement from among  
 CC the following five replacements: the 3010th base is changed from guanine  
 CC to adenine; the 4833rd base from cytosine to thymine; the 5178th base  
 CC from cytosine to adenine; the 8414th base from cytosine to thymine; and  
 CC the 14668th base from cytosine to thymine. The method can be used for  
 CC diagnosing the probability of contracting adult diseases. A confirmation  
 CC of base replacement can give a diagnosis of the level of probability of  
 CC contraction of adult diseases  
 XX SQ Sequence 20 BP; 5 A; 2 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 5.6e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 766 CTCAGGACCTCAACAC 783  
 |||||  
 Db 18 CTCAGGACTTCAATC 1

RESULT 427  
 AAX23550/c  
 ID AAX23550 standard; DNA; 20 BP.  
 XX AC AAX23550;  
 XX DT 18-JUN-1999 (first entry)  
 XX DE Deletion sequence oligonucleotide 3.  
 XX

KW Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen;  
 KW probe; cellular adhesion modulator; cellular proliferation modulator;  
 KW human retrovirus; human immunodeficiency virus; non-human retrovirus;  
 KW HIV; primer; ss.  
 XX OS Synthetic.  
 XX PN WO9911820-A1.  
 XX PD 11-MAR-1999.  
 XX PF 01-SEP-1998; 98WO-US018084.  
 XX PR 02-SEP-1997; 97US-00923771.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Chen D, Srivatsa GS;  
 XX WPI; 1999-205198/17.  
 XX DR New compositions comprising sensor arrays made up of unique probe  
 PT oligonucleotides - useful for characterizing a sample of target deletion  
 PT oligonucleotides.  
 XX PS Example 1; Page 90; 163pp; English.  
 XX CC This invention describes a novel composition comprising a number of  
 CC sensor arrays, where each array comprises a unique probe oligonucleotide,  
 CC which is the reverse complement of part of a unique target  
 CC oligonucleotide present in a mixture of target deletion sequence  
 CC oligonucleotides. The compositions form a method for characterizing a  
 CC sample of target deletion oligonucleotides which are labelled and  
 CC hybridize with the probe oligonucleotides of the sensor arrays. Such  
 CC oligonucleotides and their targets are represented in AAX23548-X23709.  
 CC Oligonucleotides characterized by the method form pharmaceutical  
 CC compositions that are useful for modulating cellular adhesion or  
 CC proliferation, and being active against a eukaryotic pathogen, a human  
 CC retrovirus, a human immunodeficiency virus (HIV), or a non-human  
 CC retrovirus, including influenza virus, Epstein-Barr virus, Respiratory  
 CC Syncytial Virus or cytomegalovirus (CMV). The compositions enable  
 CC characterization of deletion sequence oligonucleotides having related,  
 CC but different nucleobase sequences, and quantification of different  
 CC species of deletion sequence ("target") oligonucleotides in a mixture.  
 CC Also, if the specificity of the oligonucleotide's nucleobase sequence for  
 CC its reverse complement is not modified, the method may be performed using  
 CC oligodeoxynucleotides  
 XX SQ Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 5.6e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 132 GATGAAGAGATCAACG 149  
 |||||  
 Db 19 GAAGAAGAAGAGCAACG 2

RESULT 428  
 AAZ36936/c  
 ID AAZ36936 standard; DNA; 20 BP.  
 XX AC AAZ36936;  
 XX DT 13-MAR-2000 (first entry)  
 XX DE PCR primer used to amplify the 5' cistron of the gag gene of MoMLV.  
 XX KW Gag gene; MLV; retrovirus particle; recombinant adenovirus; E1 region;  
 KW E4 region; nucleic acid transfer; animal model; gene regulation;  
 KW bioavailability; gene therapy; neurodegeneration; tumour;  
 KW autoimmune disease; infection; genetic vaccination; PCR primer; ss.

```
XX OS Synthetic.
XX OS Moloney murine leukemia virus.
XX PN WO9960144-A1.
XX PD 25-NOV-1999.
XX XX
XX PF 18-MAY-1999; 99WO-FR001184.
XX PR 18-MAY-1999; 98FR-00006258.
XX PA (RHON ) RHONE-POULENC RORER SA.
XX PA (GENO-) GENOPOLEIC SARL.
XX PI Torrent C, Yeh P, Perricaudet M, Klatzmann D, Salzmann J;
XX WPI; 2000-072443/06.
XX XX
XX PT Producing retroviral particles from recombinant, defective adenoviruses,
XX PT useful for gene therapy or vaccination.
XX PS Example 1; Page 23; 73pp; French.
XX XX
XX CC PCR primers AA236935-36 were used to amplify an EcoRI/BstXI fragment
XX CC containing 5' cisron of the gag gene of Moloney murine leukemia virus
XX CC (MoMLV). The amplified fragment was used to construct the retrovirus
XX CC particles of the invention. All the genetic elements needed to construct
XX CC these retroviral particles are incorporated into one or more recombinant
XX CC adenoviruses that are defective for at least all or part of the E1 and E4
XX CC regions. The retroviral particles formed are defective, but infectious,
XX CC and transfer nucleic acid very efficiently. The amplified products are
XX CC used for in vitro or ex vivo production of retroviral particles and for
XX CC preparation of a product intended for production of retroviral particles
XX CC in vivo. The particles produced are used to transfer nucleic acid into
XX CC cells, to create animal models of disease which are useful for studying
XX CC gene regulation and bioavailability. The retroviral particles are also
XX CC useful for gene therapy of neurodegeneration, tumours, autoimmune
XX CC disease, infection or many other disorders and for genetic vaccination
XX XX
XX SQ Sequence 20 BP; 3 A; 2 C; 12 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred.No. 5.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 554 CCCTCAGCGCGCGCTCC 571
Db 18 CCTAAGCGCTCGCTCC 1
RESULT 429
AAC93176
ID AAC93176 standard; DNA; 20 BP.
XX AC AAC93176;
XX XX
XX DT 15-FEB-2001 (first entry)
XX DE Human STAT3 phosphorothioate antisense oligonucleotide SEQ ID NO:27.
XX XX
XX KW Human; mouse; STAT3; phosphorothioate; antisense oligonucleotide;
XX KW modulation; signal transducer and activator of transcription;
XX KW DNA-binding protein; signal transduction; inhibition; apoptosis;
XX KW inflammatory disease; cancer; antinflammatory; antirheumatic;
XX KW cyostatic; immunostimulatory; rheumatoid arthritis; leukaemia; myeloma;
XX KW melanoma; lymphoma; diagnosis; ss.
XX OS Homo sapiens.
XX XX
XX PN WO200061602-A1.
XX PF 19-OCT-2000.
XX XX
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```
XX PF 06-APR-2000; 200WO-US009054.
XX XX
XX PR 08-APR-1999; 99US-00288461.
XX PA (ISIS-) ISIS PHARM INC.
XX XX
XX PI Karras JG;
XX XX
XX DR WPI; 2000-619223/59.
XX XX
XX PT New antisense compound for inhibiting the expression of signal transducer
XX PT and activator of transcription 3 (STAT3) in cells or tissues and treating
XX PT diseases or condition associated with STAT3, such as rheumatoid arthritis
XX PT and cancer.
XX PS Example 2; Page 46; 104pp; English.
XX XX
XX CC The present invention describes an antisense compound (I), 8 to 30
XX CC nucleobases in length, that is targeted to a nucleic acid molecule
XX CC encoding STAT3 (Signal Transducer and Activator of Transcription) and
XX CC which inhibits the expression of it. (I) has antinflammatory,
XX CC antirheumatic, cyostatic and immunostimulatory activities. (I) is used
XX CC for inhibiting the expression of STAT3 in cells or tissues, treating an
XX CC animal having a disease or condition characterised by a reduction in apoptosis,
XX CC having a disease or condition characterised by a reduction in apoptosis,
XX CC are rheumatoid arthritis, cancer of the breast, prostate, brain, head
XX CC and/or neck, leukaemia, myeloma, melanoma or lymphoma. (I) can also be
XX CC used for diagnostic methods in detecting and determining the role of
XX CC STAT3 in various cell functions, physiological processes and conditions
XX CC and for diagnosing the conditions associated with expression of STAT3.
XX CC (I) can be used alone or with other drugs as an immunostimulator. (I) is
XX CC used in sandwich and colourimetric assays, involving enzyme conjugation
XX CC and radiolabeling and is used in diagnostic kits. AAC93150 encodes human
XX CC STAT3 and AAC93231 encodes mouse STAT3 as given in the exemplification of
XX CC the present invention. AAC93151 to AAC93230 and AAC93232 to AAC93299
XX CC represent STAT3 phosphorothioate antisense oligonucleotides, and AAC93300
XX CC represents a mismatch control oligonucleotide which are used in example
XX CC from the present invention
XX XX
XX SQ Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.9; DB 1; Length 20;
Best Local Similarity 88.9%; Pred.No. 5.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 922 CTGTTCCAGCTGCTCCGT 939
Db 2 CTGTTCCAGCTGCTCCAT 19
RESULT 430
AAF32480/c
ID AAF32480 standard; DNA; 20 BP.
XX AC AAF32480;
XX XX
XX DT 19-APR-2001 (first entry)
XX DE 1,5-anhydroglucitol dehydrogenase PCR primer SEQ ID NO:24.
XX XX
XX KW Agrobacterium tumefaciens NT1130; 1,5-anhydroglucitol dehydrogenase;
XX KW 1,5-AGDH; detection; diabetes; diabetes; PCR primer; ss.
XX OS Agrobacterium tumefaciens.
XX XX
XX PN JP2000316570-A.
XX PD 21-NOV-2000.
XX PF 13-MAY-1999; 99JP-00133157.
XX XX
```

PR 13-MAY-1999; 99JP-0013157.  
XX (DAILI-) DAIICHI KAKAGU YAKUJIN KK.  
XX WPI; 2001-128253/14.  
XX A gene encoding 1,5-anhydroglucitol dehydrogenase, a recombinant vector  
PT containing the gene, a transformant containing the recombinant vector and  
PT a recombinant 1,5-anhydroglucitol dehydrogenase protein prepared from the  
PT transformant.  
XX  
XX Example 2; Page 17; 22pp; Japanese.  
XX The present invention describes the 1,5-anhydroglucitol dehydrogenase  
CC protein (1,5-AGDH) isolated from Agrobacterium tumefaciens. The 1,5-AGDH  
CC protein is useful as a detecting reagent for early stage diabetes. The  
CC present sequence represents a PCR primer for 1,5-AGDH, which is used in  
CC an example from the present invention  
XX  
SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 5.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Oy 365 AGAGTGACCGGCTTCAG 382  
Db 19 AGAGTGACCGACTTGAG 2  
RESULT 431  
AAI66452/C  
ID AAI66452 standard; DNA; 20 BP.  
XX  
AC AAI66452;  
XX  
DT 04-DEC-2001 (first entry)  
XX  
DE Human NADH ubiquinone oxidoreductase 20KD subunit cDNA PCR primer #2.  
XX  
XX Human, NADH ubiquinone oxidoreductase 20KD subunit; BionADH20; cancer;  
KW nervous system disease; retrograde disease; gene therapy; PCR primer; ss.  
XX  
XX Homo sapiens.  
XX  
XX CN1302870-A.  
XX  
XX 11-JUL-2001.  
XX  
XX 02-NOV-1999; 99CN-00119947.  
XX  
XX 02-NOV-1999; 99CN-00119947.  
XX (SHEN-) SHENGYUAN GENE DEV CO LTD SHANGHAI.  
PA Mao Y, Xie Y;  
PI  
XX WPI; 2001-550584/62.  
XX  
XX New human NADH ubiquinone oxidoreductase 20KD subunit for treating  
PT retrograde diseases in the nervous system and cancer, .  
XX  
XX Example 3; Page 12(Disclosure); 21pp; Chinese.  
XX The present invention provides the protein and coding sequences of human  
CC NADH ubiquinone oxidoreductase 20KD subunit, designated BionADH20. The  
CC sequences can be used in the treatment of cancer and retrograde diseases  
CC in the nervous system. The present sequence is a PCR primer for the  
CC coding sequence of the invention  
XX  
SQ Sequence 20 BP; 3 A; 5 C; 12 G; 0 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 5.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Oy 554 CCTCAGCGCGCGCTCC 571  
Db 20 CCTCGGCTGCGCGCTCC 3  
RESULT 432  
AAS96793  
ID AAS96793 standard; DNA; 20 BP.  
XX  
AC AAS96793;  
XX  
XX 26-FEB-2002 (first entry)  
XX  
DE Human STAT3 antisense phosphorothioate oligodeoxynucleotide #26.  
XX  
KW STAT3; human; signal transducer and activator of transcription; ss; STAT;  
KW antisense gene therapy; Fas-mediated apoptosis; inflammatory disease;  
KW autoimmune disease; rheumatoid arthritis; cancer; breast; prostate; head;  
KW neck; brain; leukaemia; myeloma; melanoma; lymphoma; apoptosis;  
KW antiinflammatory; immunosuppressive; antirheumatic; antiarthritic;  
KW cytostatic.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
XX US2001029250-A1.  
XX  
XX 11-OCT-2001.  
XX  
XX 11-JAN-2001; 2001US-00758881.  
XX  
XX 08-APR-1999; 99US-00288461.  
XX 06-APR-2000; 2000WO-US009054.  
XX (KARR/) KARRAS J G.  
XX Karras JG;  
XX  
XX WPI; 2002-009991/01.  
XX  
XX Novel antisense compound useful for treating and diagnosing inflammatory  
PT diseases and cancers, is targeted to a nucleic acid molecule encoding  
PT signal transducer and activator of transcription proteins..  
XX  
XX Example 2; Page 13; 21pp; English.  
XX The invention relates to antisense compounds targeted to a nucleic acid  
CC molecule encoding a signal transducer and activator of transcription  
CC (STAT) protein, specifically STAT3, where the antisense compounds inhibit  
CC the expression of STAT3. The antisense sequences are useful for  
CC inhibiting the expression of STAT3 in cells or tissues, inducing Fas-  
CC mediated apoptosis in cells, and sensitising cells to apoptosis. They are  
CC also useful for treating an animal having a disease or condition  
CC associated with STAT3. These disorders include inflammatory or autoimmune  
CC disease, particularly rheumatoid arthritis, cancers, such as those of the  
CC breast, prostate, brain and head and neck and leukaemias, myelomas,  
CC melanomas and lymphomas. Also treatable are human diseases or conditions  
CC characterised by a reduction in apoptosis or an insensitivity to  
CC apoptotic signals. The sequences of the invention can be used in clinical  
CC research, for detecting and determining the role of STAT3 in various cell  
CC functions and physiological processes and for diagnosing conditions  
CC associated with the expression of STAT3. The sequences represent cDNA  
CC encoding human STAT3 and human STAT3 oligonucleotides  
XX  
SQ Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 5.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 922 CTGTTCCAGCTGCTCGT 939  
DB 2 CTGTTCCAGCTGCTCAT 19

## RESULT 433

ABL45558  
ID ABL45558 standard; DNA; 20 BP.

AC ABL45558;

XX 11-APR-2002 (first entry)

DE Human chromosome 21q22.1 PCR primer SEQ ID NO:2602.

KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;  
KW PCR primer; ss.

XX Homo sapiens.

XX JF20013121190-A.

PN 20-NOV-2001.

XX 12-MAR-2001; 2001JP-00068285.

XX 10-MAR-2000; 2000JP-00066716.

XX (RIKA ) RIKAGAKU KENKYUSHO.

PA (GENO-) GENOTEX YG.

XX WPI; 2002-144136/19.

XX Arraying genome clones.

XX Claim 6; Page 56; 528pp; Japanese.

XX The present invention describes a method of arraying genome clones. The  
CC method comprises: (a) clones of the genomic libraries contained in  
CC multiwell plates; (b) a primer designed based on each of the  
CC multiwell plates; (c) a primer designed based on the chromosome marker  
CC sequence is added to the mixture to carry out an amplification reaction;  
CC (c) a signal corresponding to the marker is detected from the resultant  
CC amplified product to specify the discrimination Nos. of the multiwell  
CC plates containing the clones having said marker sequence; (d) the order  
CC of the markers is changed so that the same discrimination Nos. succeed to  
CC the maximum in the specified discrimination Nos. to array the multiwell  
CC plates; (e) the clones in the multiwell plates of the specified  
CC discrimination Nos. are mixed respectively in each well of longitudinal  
CC and lateral directions; (f) the mixed clones are cultured and the  
CC resultant cultures are amplified by using the above primer; (g) signals  
CC are detected from the amplified products; (h) the clones in the multiwell  
CC plates are specified from the detected result; and (i) the clones are  
CC reconstituted as the positions on the chromosome and arrayed. The  
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent  
CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634  
CC represent PCR primers for human chromosome 21q22.1, which are  
CC specifically claimed for use in the present invention

XX Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 5.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1416 TCGAATTCGGATCTCCGC 1433

DB 2 TCGAATTCGGATCTCAGC 19

## RESULT 434

AAD35074

ID AAD35074 standard; DNA; 20 BP.

XX AC AAD35074;  
XX 25-JUL-2002 (first entry)  
XX Human Stat3 antisense oligonucleotide #8.  
XX Human; signal transducer and activator of transcription 3; ischaemia;  
KW immune response; Stat3; coronary atherosclerosis; vascular occlusion;  
KW hypoxia; stroke; angiogenesis; myocardial infarction; hypoglycaemia;  
KW inflammation; chronic obstructive pulmonary disease; cardiac arrest;  
KW insulin dependent diabetes mellitus; emphysema; trauma; scleroderma;  
KW shock; chronic active hepatitis; adult respiratory distress syndrome;  
KW nitrogen necrosis; proliferative angiopathy; autoimmune thyroiditis;  
KW Sjogren's syndrome; multiple sclerosis; Addison's disease; epilepsy;  
KW polymyositis; rheumatoid arthritis; autoimmune infertility; anaemia;  
KW proliferative disease; Grave's disease; ulcerative colitis; sarcoma;  
KW carcinoma; degenerative disorder; gene therapy; growth deficiency;  
KW cirrhosis; hypoproliferative disorder; lesion; antisense; ss.  
XX Homo sapiens.  
XX WO200220032-A1.  
XX 14-MAR-2002.  
XX 10-SEP-2001; 2001WO-US028254.  
XX 08-SEP-2000; 2000US-0231212P.  
XX (UYJO ) UNIV JOHNS HOPKINS.  
XX (UYSF-) UNIV SOUTH FLORIDA.  
XX Yu H, Pardoll D, Jove R, Dalton M;  
XX WPI; 2002-362218/39.  
XX Modulating angiogenesis and an immune response in an individual, for  
PT treating a hypoxic or ischemic condition, comprises administering a  
PT compound that modulates the activity of a signal transducer and activator  
XX of transcription 3.  
XX Disclosure; Page 32; 94pp; English.  
XX The invention relates to a method of modulating angiogenesis and immune  
CC response. Method involves administering to an individual a compound that  
CC modulate the activity of signal transducer and activator of transcription  
CC 3 (Stat3). Modulating angiogenesis is useful for treating or preventing  
CC hypoxic or ischaemic condition or disorder which is the result of stroke,  
CC tissue ischaemia, coronary atherosclerosis, myocardial infarction, inflammation,  
CC tissue ischaemia in the lower extremities, infarction, trauma, vascular  
CC occlusion, prenatal or postnatal oxygen deprivation, suffocation, shock,  
CC chronic obstructive pulmonary disease, choking, asphyxia, hypoglycaemia,  
CC epilepsy, emphysema, adult respiratory distress syndrome, cardiac arrest,  
CC nitrogen necrosis, proliferative angiopathy e.g. diabetic microangiopathy  
CC with neovascularisation. Suppressing an immune response is useful for  
CC ameliorating a symptom of an autoimmune disease such as systemic lupus  
CC erythematosus, multiple sclerosis, insulin dependent diabetes mellitus,  
CC Sjogren's syndrome, scleroderma, polymyositis, chronic active hepatitis,  
CC mixed connective tissue disease, primary biliary cirrhosis, pernicious  
CC anaemia, autoimmune thyroiditis, idiopathic Addison's disease, vitiligo,  
CC gluten-sensitive enteropathy, autoimmune neutropenia, myasthenia gravis,  
CC idiopathic thrombocytopenia purpura, Grave's disease, Goodpasture's  
CC disease, rheumatoid arthritis, cirrhosis, pemphigus vulgaris, autoimmune  
CC infertility, bullous pemphigoid, discoid lupus, ulcerative colitis and  
CC dense deposit disease. The method is useful in preventing or treating  
CC specific proliferative and oncogenic disease which includes sarcomas and  
CC carcinomas e.g., bladder carcinoma, colon carcinoma, chronic leukaemia,  
CC fibrosarcoma, liposarcoma, degenerative disorders, growth deficiency,  
CC hypoproliferative disorders, physical trauma, lesions and wounds. The  
CC method is also used in gene therapy. The present sequence is human Stat3  
CC antisense oligonucleotide

SQ Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 5.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 922 CTGTTCCAGCTGCTCCGT 939  
| | | | | | | | | | | | | | | | | |  
DB 2 CTGTTCCAGCTGCTGCAT 19

RESULT 435  
ABZ93374/c

ID ABZ93374 standard; DNA; 20 BP.

XX

AC ABZ93374;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX

KW Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiqunone; antiinflammatory; anti allergic;

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX

OS Homo sapiens.

XX

FN WO200285308-A2.

XX

PD 31-OCT-2002.

XX

PF 23-APR-2002; 2002WO-US013135.

XX

PR 24-APR-2001; 2001US-0286137P.

XX

PA (EPIG-) EPIGENESIS PHARM INC.

XX

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX

DR WPI; 2003-229219/22.

XX

PT Pharmaceutical composition for treating ailments associated with impaired

PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

PT ubiqunone.

XX

PS Disclosure; SEQ ID NO 8616; 872pp; English.

SQ Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 5.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1291 CTGTCACACGAGGAGTTC 1308  
| | | | | | | | | | | | | | | | | |  
DB 20 CCGTCCATCGAGGAGTTC 3

RESULT 436  
ABX09073/c

ID ABX09073 standard; DNA; 20 BP.

XX

AC ABX09073;

DT 22-JAN-2003 (first entry)

XX

DE Human dual specific phosphatase 5 phosphorothioate oligonucleotide #12.

XX

KW Human; dual specific phosphatase 5; ss; developmental disorder;

KW hyperproliferative disorder; inflammatory disorder aberrant apoptosis;

KW antiinflammatory; cytostatic; antiapoptotic; antiproliferative;

KW phosphorothioate oligonucleotide.

XX

OS Homo sapiens.

OS Synthetic.

XX

FN WO200297108-A2.

XX

PD 05-DEC-2002.

XX

PF 15-MAY-2002; 2002WO-US015305.

XX

PR 25-MAY-2001; 2001US-00865993.

XX

PA (ISIS-) ISIS PHARM INC.

XX

PI Monia BP, Watt AT;

XX

DR WPI; 2003-041418/03.

XX

PT Antisense modulation of dual specific phosphatase 5 expression used in

PT treating disorders e.g. inflammatory diseases.

XX

PS Example 15; Page 84; 110pp; English.

XX

CC The invention relates to a compound 8-50 nucleobases in length targeted

CC to a nucleic acid molecule encoding dual specific phosphatase 5, where

SQ Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 5.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 922 CTGTTCCAGCTGCTCCGT 939  
| | | | | | | | | | | | | | | | | |  
DB 2 CTGTTCCAGCTGCTGCAT 19

RESULT 435  
ABZ93374/c

ID ABZ93374 standard; DNA; 20 BP.

XX

AC ABZ93374;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX

KW Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiqunone; antiinflammatory; anti allergic;

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX

OS Homo sapiens.

XX

FN WO200285308-A2.

XX

PD 31-OCT-2002.

XX

PF 23-APR-2002; 2002WO-US013135.

XX

PR 24-APR-2001; 2001US-0286137P.

XX

PA (EPIG-) EPIGENESIS PHARM INC.

XX

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX

DR WPI; 2003-229219/22.

XX

PT Pharmaceutical composition for treating ailments associated with impaired

PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

PT ubiqunone.

XX

PS Disclosure; SEQ ID NO 8616; 872pp; English.

SQ Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 5.6e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1291 CTGTCACACGAGGAGTTC 1308  
| | | | | | | | | | | | | | | | | |  
DB 20 CCGTCCATCGAGGAGTTC 3

RESULT 436  
ABX09073/c

ID ABX09073 standard; DNA; 20 BP.

XX

AC ABX09073;

DT 22-JAN-2003 (first entry)

XX

DE Human dual specific phosphatase 5 phosphorothioate oligonucleotide #12.

XX

KW Human; dual specific phosphatase 5; ss; developmental disorder;

KW hyperproliferative disorder; inflammatory disorder aberrant apoptosis;

KW antiinflammatory; cytostatic; antiapoptotic; antiproliferative;

KW phosphorothioate oligonucleotide.

XX

OS Homo sapiens.

OS Synthetic.

XX

FN WO200297108-A2.

XX

PD 05-DEC-2002.

XX

PF 15-MAY-2002; 2002WO-US015305.

XX

PR 25-MAY-2001; 2001US-00865993.

XX

PA (ISIS-) ISIS PHARM INC.

XX

PI Monia BP, Watt AT;

XX

DR WPI; 2003-041418/03.

XX

PT Antisense modulation of dual specific phosphatase 5 expression used in

PT treating disorders e.g. inflammatory diseases.

XX

PS Example 15; Page 84; 110pp; English.

XX

CC The invention relates to a compound 8-50 nucleobases in length targeted

CC to a nucleic acid molecule encoding dual specific phosphatase 5, where



```
AC ACC69706;
XX
XX 21-JUL-2003 (first entry)
XX
XX Mouse CLASP-5 PCR primer SEQ ID NO:85.
XX
XX Human; mouse; CLASP membrane protein; CLASP; cell surface molecule;
XX cadherin-like asymmetry protein; immune response; immunosuppressive;
XX antiinflammatory; antirheumatic; antiarthritic; dermatological;
XX nephrotropic; autoimmune disease; Addison's disease; dermatitis;
XX rheumatoid arthritis; organ rejection; graft-versus-host disease;
XX inflammation; sepsis; arthritis; nephritis; infectious disease;
XX PCR primer; ss.
XX
XX Mus sp.
XX Synthetic.
XX
XX WO2003025120-A2.
XX
XX 27-MAR-2003.
XX
XX 02-AUG-2002; 2002WO-US024482.
XX
XX 03-AUG-2001; 2001US-0310028P.
XX
XX 15-OCT-2001; 2001US-00978244.
XX
XX (ARBO-) ARBOR VITA CORP.
XX
XX Lu PS, Garman JD, Candia AF;
XX
XX WPI; 2003-354593/33.
XX
XX New cadherin-like asymmetry protein (CLASP) polypeptides and
XX polynucleotides, useful for treating or preventing autoimmune diseases,
XX organ rejection or graft-versus-host disease, inflammation, or infectious
XX diseases.
XX
XX Example 2; Page 119; 398pp; English.
XX
XX ACC69640 to ACC69648 encode the cadherin-like asymmetry proteins (CLASPs)
XX given in ABR43625 to ABR43633. CLASP sequences have immunosuppressive,
XX antiinflammatory, antirheumatic, antiarthritic, dermatological and
XX nephrotropic activities. Compositions comprising a CLASP-1 protein can be
XX used for treating or preventing a CLASP-1 mediated disease, particularly
XX an autoimmune disease caused or exacerbated by increased activity of TH1
XX (helper T) cells. CLASP polynucleotides can be used as probes or primers
XX for detecting CLASP expression, for screening CLASP agonists or
XX antagonists, for creating transgenic animals, chromosome mapping,
XX identifying animals from minute biological samples, polymorphic markers
XX for forensic analysis, and as reagents for paternity testing. CLASP
XX polynucleotides or polypeptides are useful in treating or preventing
XX autoimmune diseases (e.g. Addison's disease, rheumatoid arthritis, or
XX dermatitis), organ rejection or graft-versus-host disease, inflammation
XX (e.g. sepsis, arthritis or nephritis), or infectious diseases. ACC69649
XX to ACC69727 and ABR43634 to ABR43642 represent sequences given in the
XX exemplification of the present invention
XX
XX Sequence 20 BP; 10 A; 5 C; 2 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 5.6e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 889 AACATCATCAACATGCAC 906
XX |||||
XX 3 AACATCATCAACAGGAC 20
XX
XX RESULT 438
XX ABZ70994/C
XX ID ABZ70994 standard; DNA; 20 BP.
XX
XX AC ABZ70994;
```

```
XX
XX 28-APR-2003 (first entry)
XX
XX Human HKR1 phosphorothioate antisense oligonucleotide SEQ ID NO:22.
XX
XX Human; HKR1; cytostatic; HKR1 inhibitor; hyperproliferative disorder;
XX cancer; antisense oligonucleotide; 2'-O-methoxyethyl; 2'-MOE; control;
XX phosphorothioate; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "phosphorothioate linkages"
XX
XX modified_base 1..5
XX /tag= b
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyl (2'-MOE) nucleotides"
XX
XX modified_base 16..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyl (2'-MOE) nucleotides"
XX
XX WO2003004513-A1.
XX
XX 16-JAN-2003.
XX
XX 02-JUL-2002; 2002WO-US021090.
XX
XX 03-JUL-2001; 2001US-00898556.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett FC, Freier SM;
XX
XX WPI; 2003-210336/20.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding HKR1, useful for treating a disease/condition
XX associated with HKR1, such as hyperproliferative disorder, e.g. lung,
XX brain or breast cancer.
XX
XX Example 15; Page 72; 105pp; English.
XX
XX The present invention describes a compound 8-50 nucleobases in length
XX targeted to, and which specifically hybridizes with a nucleic acid
XX molecule encoding HKR1, and inhibits the expression of HKR1. Also
XX described: (1) a compound 8-50 nucleobases in length that specifically
XX hybridizes with at least an 8-nucleobase portion of an active site on a
XX nucleic acid molecule encoding HKR1; (2) a composition comprising the
XX compound and a carrier or diluent; (3) a method for inhibiting the
XX expression of HKR1 in cells or tissues by contacting the cells or tissues
XX with the compound so that expression of HKR1 is inhibited; and (4) a
XX method of treating an animal having a disease or condition associated
XX with HKR1 by administering to the animal a therapeutic or prophylactic
XX amount of the compound so that expression of HKR1 is inhibited. HKR1
XX antisense oligonucleotides have cytostatic activities and can be used as
XX HKR1 inhibitors. The compound, composition and methods are useful for
XX treating a disease or condition associated with HKR1, such as a
XX hyperproliferative disorder, e.g. lung, brain or breast cancer, by
XX inhibiting the expression of HKR1. They are also useful in research and
XX diagnostics for modulating the expression of HKR1. The present sequence
XX represents a human HKR1 chimeric phosphorothioate oligonucleotide having
XX 2'-O-methoxyethyl (2'-MOE) wings and a deoxy gap, which is an antisense
XX oligonucleotide used in the inhibition of human HKR1 in an example from
XX the present invention
XX
XX Sequence 20 BP; 3 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 5.6e+02;
```

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 673 AGCAGCTCAGACAC 690  
 |||||  
 Db 18 AGCAGCTCAGACAC 1

RESULT 439  
 ACF39677/C  
 ID ACF39677 standard; DNA; 20 BP.  
 AC ACF39677;  
 XX  
 DT 29-SEP-2003 (first entry)  
 XX

MHC class II transactivator antisense oligonucleotide SEQ ID NO:80.  
 DE Human; major histocompatibility complex class II transactivator;  
 KW MHC class II transactivator; antisense modulation; immunosuppressive;  
 KW antimicrobial; antidiabetic; antirheumatic; antiarthritic; cytostatic;  
 KW neurotropic; neuroprotective; immunostimulant; autoimmune disorder;  
 KW MHC class II transactivator inhibitor; infection; transplant rejection;  
 KW diabetes; rheumatoid arthritis; cancer; Alzheimer's disease;  
 KW multiple sclerosis; severe combined immunodeficiency disease;  
 KW phosphorothioate; antisense oligonucleotide; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.

Key Location/Qualifiers  
 modified\_base 1..20  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "phosphorothioate linkages; all cytidine residues  
 are 5-methylcytidines"  
 modified\_base 1..5  
 FT /tag= b  
 FT /mod\_base= OTHER  
 FT /note= "2'-O-methoxyethyls"  
 modified\_base 16..20  
 FT /tag= c  
 FT /mod\_base= OTHER  
 FT /note= "2'-O-methoxyethyls"  
 WO2003050247-A2.  
 XX  
 PN 19-JUN-2003.  
 XX  
 PD 04-DEC-2002; 2002WO-US038616.  
 XX  
 PF 05-DEC-2001; 2001US-00006366.  
 XX  
 PR (ISIS-) ISIS PHARM INC.  
 XX  
 PA Bennett FC, Dobie KW;  
 XX  
 PI WPI; 2003-577294/54.  
 XX  
 DR New antisense oligonucleotides for modulating MHC class II transactivator  
 PT gene expression, particularly useful for treating autoimmune disorders  
 PT such as transplant rejection, Alzheimer's disease, or multiple sclerosis,  
 PT or infection.  
 XX  
 PS Example 15; Page 84; 129pp; English.  
 XX

The present invention describes a compound (I) that is 8-50 nucleobases  
 in length: (a) targets a nucleic acid molecule encoding major  
 CC histocompatibility complex (MHC) class II transactivator, and  
 CC specifically hybridises with the nucleic acid encoding the MHC class II  
 CC transactivator, and inhibits the expression of MHC class II  
 CC transactivator; or (b) specifically hybridises with at least an 8-  
 CC nucleobase portion of an active site on a nucleic acid molecule encoding  
 CC MHC class II transactivator. (I) has immunosuppressive, antimicrobial,

CC antidiabetic, antirheumatic, antiarthritic, cytostatic, neurotropic,  
 CC neuroprotective and immunostimulant activities, and can be used as an MHC  
 CC Class II transactivator inhibitor. The MHC class II transactivator  
 CC antisense oligonucleotides can be used for treating an animal having a  
 CC disease or condition associated with MHC class II transactivator, e.g.  
 CC autoimmune disorder or infection. The antisense oligonucleotides can be  
 CC used for inhibiting the expression of MHC class II transactivator in  
 CC cells or tissues. In particular, these diseases include transplant  
 CC rejection, diabetes, rheumatoid arthritis, cancer, Alzheimer's disease,  
 CC multiple sclerosis, or severe combined immunodeficiency disease. The  
 CC antisense compounds are useful for diagnostics, prophylaxis, or as  
 CC research reagents or kits. The present sequence represents a human MHC  
 CC class II transactivator chimeric phosphorothioate antisense  
 CC oligonucleotide, which is used in an example from the present invention  
 XX  
 SQ Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 5.6e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1567 CCTGACTCAGGAGCCCA 1584  
 |||||  
 Db 19 CCTGACTCAGGAGCTCA 2

RESULT 440  
 ADC98368/C  
 ID ADC98368 standard; DNA; 20 BP.  
 XX  
 AC ADC98368;  
 XX  
 DT 01-JAN-2004 (first entry)  
 XX  
 DE IGF503 polymorphism marker PCR primer B primer seq.  
 XX  
 KW low bone mineral density; BMD; bone damage; polymorphism; osteoporosis;  
 KW single nucleotide polymorphism; SNP; PCR primer; ss; human.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 OS WO2003054218-A2.  
 PN 03-JUL-2003.  
 PD 19-DEC-2002; 2002WO-US040948.  
 XX  
 PF 20-DEC-2001; 2001US-0342711P.  
 XX  
 PR 04-NOV-2002; 2002US-0423559P.  
 XX  
 PA (INCY-) INCYTE GENOMICS INC.  
 XX  
 PI Jones KA, Valdes A, Townley DJ, Mangion J, Galway N, Bennett S;  
 PI McKay I, Schafer A;  
 XX  
 WPI; 2003-559156/52.

Determining whether an individual is predisposed to susceptibility to low  
 bone mineral density (BMD) and/or bone damage, involves identifying  
 PT polymorphisms in associated genes.

Example 8; Page 237; 246pp; English.

The present invention describes a method of determining whether an  
 individual is predisposed to susceptibility to low bone mineral density  
 (BMD) and/or bone damage comprising identifying whether the individual  
 CC has at least one polymorphism in a polynucleotide encoding a protein,  
 CC where the polynucleotide is one of 81 200-500 nucleotide sequences (S1,  
 CC see ADC98235 to ADC98315). An agent identified in a method from the  
 CC present invention which can be used for the prevention or treatment of a  
 CC disease resulting in susceptibility to low BMD and/or bone damage is  
 CC useful in the manufacture of a medicament for use in modulating the

CC susceptibility to low BMD and/or bone damage. The disease associated with  
 CC low BMD and/or bone damage is osteoporosis. The present PCR primer  
 CC sequence is used in the exemplification of the present invention.

SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 5.6e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 311 TCAGCTCTGCACGAGAGA 328  
 Db 18 TCATCTCTGCACCTGAGA 1

RESULT 441

ADE28924

ID ADE28924 standard; DNA; 20 BP.

XX AC ADE28924;

XX DT 29-JAN-2004 (first entry)

XX DE Forward Ag5335 RT-PCR primer used to amplify human NOV RNA.

XX KW NOVX; antidiabetic; anorectic; cardiant; hypotensive;

XX KW antiarteriosclerotic; virucide; antibacterial; fungicide; protozoacide;

XX KW nootropic; neuroprotective; antiparkinsonian; anticonvulsant;

XX KW osteopathic; antiarthritic; antiinflammatory; dermatological;

XX KW antiasthmatic; antilipemic; metabolic; diabetes; obesity; infectious;

XX KW anorexia; cancer; cardiovascular; hypertension; atherosclerosis;

XX KW neurodegenerative; Alzheimer's disease; Parkinson's; epilepsy; immune;

XX KW osteoarthritis; haemopoietic; inflammatory skin; asthma; dyslipidaemia;

XX KW wound healing; angiogenesis; Gene therapy; chromosome mapping;

XX KW tissue typing; human; NOV; PCR; primer; ss; RT-PCR.

XX OS Homo sapiens.

XX PN WO2003040330-A2.

XX PD 15-MAY-2003.

XX PF 05-NOV-2002; 2002WO-US035536.

XX PR 05-NOV-2001; 2001US-0338626P.

XX PR 05-DEC-2001; 2001US-033600P.

XX PR 07-DEC-2001; 2001US-0338285P.

XX PR 12-DEC-2001; 2001US-0341346P.

XX PR 17-DEC-2001; 2001US-0341477P.

XX PR 20-DEC-2001; 2001US-0341540P.

XX PR 20-DEC-2001; 2001US-0342592P.

XX PR 27-DEC-2001; 2001US-0344297P.

XX PR 31-DEC-2001; 2001US-0344903P.

XX PR 17-APR-2002; 2002US-0373288P.

XX PR 15-MAY-2002; 2002US-0380981P.

XX PR 17-MAY-2002; 2002US-0381495P.

XX PR 28-MAY-2002; 2002US-0383534P.

XX PR 28-MAY-2002; 2002US-0383744P.

XX PR 29-MAY-2002; 2002US-0383829P.

XX PR 29-MAY-2002; 2002US-0384024P.

XX PR 07-AUG-2002; 2002US-0401788P.

XX PR 26-AUG-2002; 2002US-0406353P.

XX PR 31-OCT-2002; 2002US-00287971.

XX PA (CURA-) CURAGEN CORP.

XX PI Alsbrook JP, Alvarez E, Anderson DW, Baron M, Boldog FL;

PI Burgess CE, Casman SJ, Chapoval A, Dhanabal M, Edinger SR, Eisen A;

PI Ellerman K, Eitenberg S, Gangoli EA, Gerlach VL, Gorman L;

PI Grosse WM, Guo X, Hackett C, Ji W, Kekuda R, Khrantsov NV;

PI Ieplesky DM, Li L, Macdougall JR, Malyankar UM, Mazur A, McQueeney K;

PI Mezes PS, Miller CE, Millet I, Mishra VS, Padigaru M, Patturajan M;

PI PI

PI Pena CBA, Peyman JA, Rastelli L, Rieger DK, Shenoy SG, Shimkets RA;  
 PI Smithson G, Starling G, Spytek KA, Stone DJ, Tchernev VT, Twomlow N;  
 PI Vernet CAM, Zerhusen BD, Zhong M;  
 XX WPI; 2003-441555/41.

XX New isolated NOVX polypeptides and polynucleotides, useful for  
 PT preventing, diagnosing or treating NOVX-associated disorders, e.g.  
 PT osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,  
 PT asthma, or infections.

PS Example C; SEQ ID NO 301; 447pp; English.

CC The invention relates to a novel isolated NOVX polypeptide. The  
 CC polypeptide of the invention demonstrates, antidiabetic, anorectic,  
 CC cardiant, hypotensive, antiarteriosclerotic, virucide, antibacterial,  
 CC fungicide, protozoacide, nootropic, neuroprotective, antiparkinsonian,  
 CC anticonvulsant, osteopathic, antiarthritic, antiinflammatory,  
 CC dermatological, antiasthmatic and antilipemic activities. The  
 CC polypeptides, nucleic acid molecules and antibodies may be useful for  
 CC treating or diagnosing diseases including metabolic disorders such as  
 CC diabetes and obesity, infectious diseases, anorexia, cancer,  
 CC cardiovascular diseases including hypertension and atherosclerosis,  
 CC neurodegenerative disorders such as Alzheimer's disease, Parkinson's  
 CC disease and epilepsy, immune disorders e.g. osteoarthritis, haemopoietic  
 CC disorders, inflammatory skin disorders, asthma and dyslipidaemia.  
 CC Identify molecules that modulate or inhibit neurogenesis, cell  
 CC differentiation and proliferation, haemopoiesis, wound healing and  
 CC angiogenesis, as well as in gene therapy. Finally, the nucleic acids may  
 CC be used as hybridisation probes, in chromosome mapping, tissue typing,  
 CC preventive medicine and pharmacogenomics. The current sequence is that of  
 CC the RT-PCR primer which was used within the exemplification of the  
 CC invention.

XX Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 5.6e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1530 GCTACAAAAGGAGGCCAG 1547

Db 1 GCTACAAAAGGAGGCCAG 18

RESULT 442

AA09234

ID AAX09234 standard; DNA; 21 BP.

XX AC AAX09234;

XX DT 24-MAR-1999 (first entry)

XX DE Human biallelic polymorphic marker upstream primer #114.

XX KW Polymorphism; biallelic; human; forensic; paternity testing; disease;

XX KW detection; phenotypic typing; characteristic; infection; hereditary;

XX KW autoimmune disease; cancer; inflammation; drug; therapy; medicament;

XX KW treatment; marker; primer; ss.

XX OS Synthetic.

XX OS Homo sapiens.

XX PN WO9820165-A2.

XX PD 14-MAY-1998.

XX PF 05-NOV-1997; 97WO-US020313.

XX PR 06-NOV-1996; 96US-0030455P.

XX PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.

XX Lander ES, Wang D, Hudson T;  
XX WPI; 1998-286974/25.  
XX  
XX New isolated nucleic acid segments from the human genome - used for  
XX determining polymorphic forms for use in e.g. forensics, paternity  
XX testing or phenotypic typing for disease.  
XX  
XX Claim 15; Page 59; 310pp; English.  
XX  
XX AAX09121-X10268 are allele-specific oligonucleotide primers used in the  
XX isolation of various biallelic polymorphic markers found in the human  
XX genome (represented in AAX10269-X12937). These primers can be used in a  
XX method for determining polymorphic forms in an individual for use in e.g.  
XX forensics, paternity testing or for phenotypic typing for diseases such  
XX as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular  
XX dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial  
XX hypercholesterolemia, polycystic kidney disease, hereditary  
XX spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary  
XX haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos  
XX syndrome, osteogenesis imperfecta, acute intermittent porphyria,  
XX autoimmune diseases, inflammation, cancer, diseases of the nervous  
XX system, infection by pathogenic microorganisms, and characteristics such  
XX as longevity, appearance (e.g. baldness, obesity), strength, speed,  
XX endurance, fertility, and susceptibility or receptivity to particular  
XX drugs or therapeutic treatments. The isolated polymorphic nucleic acid  
XX segments can also be used to produce medicaments for the treatment or  
XX prophylaxis of such diseases  
XX  
XX Sequence 21 BP; 1 A; 9 C; 0 G; 11 T; 0 U; 0 Other;  
XX  
XX Query Match 0.8%; Score 14.8; DB 1; Length 21;  
XX Best Local Similarity 88.9%; Pred. No. 5.9e+02;  
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX  
XX Qy 826 TCCCTCACCCTTCTCTTT 843  
XX Db 1 TTCTCACCCTTCTCTTT 18  
XX  
XX RESULT 443  
XX AAV43747  
XX ID AAV43747 standard; DNA; 21 BP.  
XX AC AAV43747;  
XX  
XX 16-NOV-1998 (first entry)  
XX  
XX Cancer associated gene primer 16.  
XX  
XX ss; cancer; PCR; Northern blotting; ribonuclease protection assay;  
XX diagnosis; metastatic cancer; primer; amplification.  
XX  
XX Synthetic.  
XX  
XX WO9837187-A1.  
XX  
XX 27-AUG-1998.  
XX  
XX 18-FEB-1998; 98WO-JP000667.  
XX  
XX 21-FEB-1997; 97JP-00052508.  
XX  
XX (TAKI ) TAKARA SHUZO CO LTD.  
XX  
XX Yoshikawa Y, Mukai H, Asada K, Hino F, Kato I;  
XX WPI; 1998-467552/40.  
XX  
XX Detection of cancer cells in tissue samples - by changes in mRNA  
XX expression compared to normal tissue of specific cancer-associated gene  
XX sequences.

XX  
XX Disclosure; Page 71; 92pp; Japanese.  
XX  
XX The primers AAV43732-V43776 were to produce cancer associated gene  
XX fragments which can be used to detect cancer cells in tissue samples or  
XX biological fluids. They are detected by monitoring the change in mRNA  
XX expression as compared to normal tissue of one or more cancer-associated  
XX genes whose cDNA stringently hybridises to the nucleic acid fragments.  
XX The change in expression may be an increase or a decrease compared to  
XX normal tissue. The mRNA expression may be determined by PCR, Northern  
XX blotting or ribonuclease protection assay, or by determining the change  
XX in the amount of protein encoded by the gene(s) as compared to normal  
XX tissue, for example by using a labelled antibody recognising the protein.  
XX Detection of cancer cells for cancer diagnosis, including detection of  
XX metastatic cancer cells in tissues other than the primary tumour site  
XX  
XX Sequence 21 BP; 9 A; 7 C; 2 G; 3 T; 0 U; 0 Other;  
XX  
XX Query Match 0.8%; Score 14.8; DB 1; Length 21;  
XX Best Local Similarity 88.9%; Pred. No. 5.9e+02;  
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX  
XX Qy 1311 GACATACAACTACCCCAA 1328  
XX Db 2 GAACACAACTACCCCAA 19  
XX  
XX RESULT 444  
XX AAZ26230  
XX ID AAZ26230 standard; DNA; 21 BP.  
XX AC AAZ26230;  
XX  
XX 30-NOV-1999 (first entry)  
XX  
XX Human polymorphic region 419.  
XX  
XX Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;  
XX cell viability; loss of heterozygosity; precancerous condition; ASI;  
XX allele specific inhibitor; somatic cell; diagnosis; prevention;  
XX atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;  
XX dysplastic lesion; benign tumour; polycystic kidney disease; transplant;  
XX graft versus host disease; malignant cell removal; bone marrow; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO9841648-A2.  
XX  
XX 24-SEP-1998.  
XX  
XX 19-MAR-1998; 98WO-US005419.  
XX  
XX 20-MAR-1997; 97US-0041057P.  
XX  
XX (VARI-) VARIAGENICS INC.  
XX  
XX Housman D, Ledley FD, Stanton VP;  
XX WPI; 1998-521232/44.  
XX  
XX Identifying target genes for allele-specific drugs - used for diagnosis,  
XX prevention and treatment of, e.g. cancers, atherosclerotic plaque,  
XX dysplastic lesions, endometriosis or graft versus host disease.  
XX  
XX Disclosure; Fig 7; 605pp; English.  
XX  
XX This invention describes a novel method for identifying an inhibitor  
XX potentially useful for treatment of cancer, where the inhibitor is active  
XX on a gene vital for cell growth or viability, and where the gene is  
XX subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is  
XX used for preventing the development of cancer in a patient having a  
XX precancerous condition, by administering to the patient a first allele  
XX specific inhibitor (ASI) targeted to an allele of a first essential gene

CC present in cells of the precancerous condition, where the normal somatic  
 CC cells of the patient are heterozygous for the first gene, the inhibitor  
 CC is active on at least one but less than all allelic forms of the gene  
 CC present in a population and targets only one allelic form present in the  
 CC normal somatic cells, and the first gene. The products and methods can be  
 CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.  
 CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic  
 CC lesions, benign tumours, endometriosis, polycystic kidney disease, and  
 CC graft versus host disease. The method can also be used to remove  
 CC malignant cells from bone marrow transplants. ANZ25612-236825 represent  
 CC human polymorphic sites described in the method of the invention  
 XX  
 SQ Sequence 21 BP: 6 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

CC normal somatic cells, and the first gene. The products and methods can be  
 CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.  
 CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic  
 CC lesions, benign tumours, endometriosis, polycystic kidney disease, and  
 CC graft versus host disease. The method can also be used to remove  
 CC malignant cells from bone marrow transplants. AA25912-Z26925 represent  
 CC human polymorphic sites described in the method of the invention  
 XX  
 SQ Sequence 21 BP; 7 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 21;  
 : Best Local Similarity 88.9%; Pred. No. 5.9e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0

CC normal somatic cells, and the first gene. The products and methods can be used in the diagnosis, prevention and treatment of LOH disorders, e.g. cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic lesions, benign tumours, endometriosis, polycystic kidney disease, and graft versus host disease. The method can also be used to remove malignant cells from bone marrow transplants. AA225812-226825 represent human polymorphic sites described in the method of the invention

SQ Sequence 21 BP; 7 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 21;  
Best Local Similarity 88.9%; Pred.No.5.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0

Qy 991 CAGAACCTGCTCATCAC 1008  
||| ||||||||  
Db 3 CAGGAGCTGCTCATCAC 20

RESULT 446  
ABZ76238/c  
ID ABZ76238 standard; DNA; 21 BP.  
XX AC  
XX ABZ76238;  
DT XX  
DT 12-JUN-2003 (first entry)  
XX XX  
DE Murine chemokine receptor CCR1 specific RT-PCR reverse primer.  
XX XX  
KW CCR1; renal fibrosis; chemokine receptor; antiinflammatory; nephrotropic;  
KW collagen; mouse; RT-PCR; primer; ss.  
XX XX  
OS Mus sp.  
XX XX  
FN NC02003013656-A2.  
XX XX  
PD 20-FEB-2003.  
XX XX  
PF 05-AUG-2002; 2002WO-US024763.  
XX XX  
PR 07-AUG-2001; 2001US-0310538P.  
PR 26-JUL-2002; 2002US-00205713.  
XX XX  
PA (SCHD ) SCHERING AG.  
XX XX  
PI Horuk R;  
PL XX  
DR WFI; 2003-278443/27.  
XX XX  
PT Composition for treating progressive renal fibrosis comprises non-peptide  
PT chemokine CCR1 receptor antagonist, especially arylmethylpiperazine  
PT derivative.  
XX XX  
PS Example 6; Page 23; 43pp; English.  
XX XX  
CC The invention relates to a composition for treating progressive renal  
CC fibrosis in mammals (preferably humans) and involves a non-peptide  
CC chemokine CCR1 receptor antagonist. The compositions are useful for  
CC treating progressive renal fibrosis in humans and in cats, dogs, pigs,  
CC cattle, sheep, goats, horses and rabbits. Sequences ABZ76231-245  
CC represent oligonucleotide primers and probes used in an in vivo assay of  
CC chemokine receptor and collagen I mRNA expression  
XX XX  
SQ Sequence 21 BP; 2 A; 7 C; 4 G; 8 T; 0 U; 0 Other;

```

RESULT 447
ADD15228
ID ADD15228 standard; DNA; 21 BP.
XX
XX
AC ADD15228;
XX
DT 15-JAN-2004 (first entry)
XX
DE Bacterial cytochrome P450 oligo used to design PCR primers (SeqID 11).
XX
XX epothilone B hydroxylase; ebb; macrolide; microtubule stabilising;
KW cytotoxic; anticancer; neuroprotective; virucidal; antiinflammatory;
KW osteopathic; cancer; angiogenesis; retinal vasculature;
KW aplastic anaemia; restenosis; Alzheimer's disease;
KW systemic lupus erythematosus; AIDS; ss; P450-2+; P450-2-.
XX
OS Bacteria.
XX
PN WO2003057830-A2.
XX
XX 17-JUL-2003.
XX
XX 17-DEC-2002; 2002WO-US040359.
XX
XX 26-DEC-2001; 2001US-0344271P.
XX
XX (BRIM ) BRISTOL-MYERS SQUIBB CO.
XX
XX Basch JD, Chiang S, Liu S, Nayeem A, Sun Y, Li Y;
XX WPI; 2003-627332/59.
XX
XX Novel epothilone B hydroxylase polypeptide, and mutants of the
PT polypeptide which is useful for producing a epothilone analog.
XX
XX Disclosure; SEQ ID NO 11; 127pp; English.
XX
XX This invention relates to novel isolated nucleic acid molecules, and
CC encoded proteins thereof, for epothilone B hydroxylase (ebb).
CC Specifically, it refers to recombinant microorganisms expressing ebb, ebb
CC mutants and/or ferredoxin, which are capable of hydroxylating small
CC organic molecule compounds i.e. epothilones. Epothilones are macrolide
CC compounds produced by Sorangium cellulosum, which have been shown to
CC exert microtubule stabilising effects similar to paclitaxel such that
CC they have cytotoxic activity against rapidly proliferating cells.
CC Accordingly, they are natural anticancer agents with neuroprotective,
CC virucidal, antiinflammatory and osteopathic activities. The present
CC invention describes epothilones and analogues thereof as useful for
CC treating cancers, inhibiting angiogenesis and treating blindness related
CC to retinal vascularisation. Furthermore, they can be used for conditions
CC including aplastic anaemia, restenosis, Alzheimer's disease, systemic
CC lupus erythematosus and AIDS. This oligonucleotide sequence (SeqID 11) is
CC derived from a bacterial cytochrome P450 gene (locus STMSUACB) and used
CC to design PCR primers P450-2+ and P450-2- for the amplification of
CC genomic epothilone B hydroxylase DNA of the invention.
XX
SQ Sequence 21 BP; 3 A; 5 C; 10 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 5.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1218 CACGGTGGAGGACAGCT 1235
DB 4 CGCGGTGGAGGACTGCT 21
|||||
|||||

RESULT 448
AAT02483/c
ID AAT02483 standard; DNA; 22 BP.
XX
XX AAT02483;
XX
XX Primer #2 for immunoglobulin kappa variable region V kappa3-2.

```

```

XX
DT 13-JUN-1996 (first entry)
XX
DE Primer for domain D of the retinoid X receptor beta gene.
XX
XX Steroid/thyroid receptor superfamily; DNA-binding domain; transgenesis;
KW retinoid X receptor; transgenic mouse; development; physiology; therapy;
KW RXR-alpha-deficient; ventricular chamber development; ischaemia; RXR;
KW cardiac hypertrophy; polymerase chain reaction; primer; amplify; PCR;
KW reverse transcriptase; ss.
XX
OS Synthetic.
XX
PN WO9530741-A1.
XX
PD 16-NOV-1995.
XX
PF 09-MAY-1995; 95WO-US005870.
XX
PR 10-MAY-1994; 94US-00241044.
XX
XX (SALK ) SALK INST BIOLOGICAL STUDIES.
XX (REGC ) UNIV CALIFORNIA.
XX
XX Sucov HM, Evans RM, Chien KR;
XX WPI; 1995-404109/51.
XX
XX Transgenic mice expressing low levels of steroid-thyroid receptors -
PT useful for study of role of steroid-thyroid receptors in embryogenesis,
PT e.g. RXR alpha in cardiac development.
XX
XX Example 4; Page 20; 41pp; English.
XX
XX AAT02480-T02483 are amplification primers for regions of the DNA reverse
CC transcribed by the sequence represented in AAT02479. This sequence is a
CC sense primer corresponding to a region of domain D of the retinoid X
CC receptor (RXR) beta gene and was used as a control. The DNA was obtained
CC from transgenic mice that had a mutation in the RXR alpha gene. RXR is a
CC member of the steroid/thyroid receptor superfamily. By mutating the DNA
CC binding domain sequence in one of the steroid/thyroid receptors (e.g. the
CC retinoid X receptor) of a mouse, a transgenic mouse expressing less than
CC endogenous levels of the receptor in at least 1 specific tissue type can
CC be created. The transgenic mouse can then be used as a model for
CC determining the role of members of the steroid/thyroid receptor
CC superfamily in development and physiology. RXR-alpha-deficient mice
CC created in this manner allow for molecular dissection of ventricular
CC chamber development. The mice are also useful for determining the
CC selectivity of a ligand for a steroid/thyroid receptor. The retinoid
CC compounds identified can be used for treating cardiac hypertrophy,
CC ischaemia and other cardiac malfunctions
XX
SQ Sequence 22 BP; 2 A; 11 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.8; DB 1; Length 22;
Best Local Similarity 88.9%; Pred. No. 6.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 31 CAGAGGTAGGAGGAGGA 48
DB 22 CAGAGGTAGGAGGAGGAA 5
|||||
|||||

RESULT 449
AAT92763
ID AAT92763 standard; DNA; 22 BP.
XX
XX AAT92763;
XX
XX 05-FEB-1998 (first entry)
XX
XX Primer #2 for immunoglobulin kappa variable region V kappa3-2.

```

KW PCR primer; amplify; human gene; chimeric non-human animal, antibody;  
 KW transgenic mouse; chromosome fragment; hybridoma production; microcell;  
 KW Huntington's disease gene; pluripotent cell; interleukin-2 gene;  
 KW myeloma cell; immunoglobulin; variable region; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX WO9707671-A1.  
 FN  
 XX  
 XX 03-SEP-1998.  
 XX  
 XX 02-MAR-1998; 98WO-JP000860.  
 XX  
 XX 28-FEB-1997; 97JP-00062309.  
 XX  
 XX (KIRI ) KIRIN BEER KK.  
 PA  
 XX Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I;  
 PI WPI; 1997-178822/16.  
 XX  
 XX Chimeric animal containing foreign chromosome - for expression of a  
 PT foreign gene, e.g. an antibody.  
 XX  
 XX Example 1; Page 21; 142pp; Japanese.  
 PS  
 XX AAT92758-T92817 represent amplification primers for human genes which are  
 CC used in the chimeric non-human animal of the invention. The chimeric non-  
 CC human animal of the invention, preferably a mouse, contains a foreign  
 CC chromosome(s) or chromosome fragment. The animal is produced by obtaining  
 CC a hybrid cell by fusion of a cell containing the foreign chromosome with  
 CC a cell having the ability to form microcells. The microcells are  
 CC prepared, and fused with cells having differentiative pluripotency to  
 CC form cells having differentiative pluripotency and containing the foreign  
 CC chromosome. These cells are then introduced into an embryo, which is then  
 CC implanted and brought to term. The foreign chromosome segment is at least  
 CC 1 Mb long and preferably contains a region for an antibody. The  
 CC chromosome segment could also contain genes associated with human  
 CC disease, such as the interleukin-2 gene, and the Huntington's disease  
 CC gene. The expression of foreign genes (especially human genes) in a non-  
 CC human animal is useful for efficient production of proteins, especially  
 CC of human antibodies. Particular cells of the chimeric animal which  
 CC express the foreign genetic material can be isolated and fused with  
 CC myeloma cells to produce hybridomas capable of expressing the foreign  
 CC gene (e.g. to produce the antibody)  
 XX  
 SQ Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.8; DB 1; Length 22;  
 Best Local Similarity 88.9%; Pred. No. 6.2e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 356 CTGATGGGAGAGTGACC 373  
 Db 3 CTGATGGTGGAGGTGAAC 20  
 RESULT 450  
 AAV52760  
 ID AAV52760 standard; DNA; 22 BP.  
 XX  
 AC AAV52760;  
 XX  
 XX 27-NOV-1998 (first entry)  
 DT  
 XX Immunoglobulin kappa variable PCR primer V $\kappa$ -2 #2.  
 DE  
 XX Pluripotent cell; intrinsic gene; chimeric non-human animal;  
 KW construction; human; antibiotic gene; cancer cell; embryonic; PCR primer;  
 KW ss.  
 XX

OS Synthetic.  
 OS Homo sapiens.  
 XX WO9837757-A1.  
 FN  
 XX 03-SEP-1998.  
 XX  
 XX 02-MAR-1998; 98WO-JP000860.  
 XX  
 XX 28-FEB-1997; 97JP-00062309.  
 XX  
 XX (KIRI ) KIRIN BEER KK.  
 PA  
 XX Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I;  
 PI WPI; 1998-480821/41.  
 XX  
 XX Pluripotent cells containing foreign chromosomes or fragments - and non-  
 PT human chimeric animals constructed using them and expressing foreign  
 PT genes such as human antibiotic genes.  
 XX  
 PS Example 1; Page 33; 217pp; Japanese.  
 XX  
 XX The present invention describes a method of obtaining pluripotent cells  
 CC containing foreign chromosomes or their fragments (preferably at least  
 CC 670 kb in length, especially more than 1000 kb) by preparing cancerous  
 CC cells containing the foreign chromosomes or fragments, then fusing these  
 CC with pluripotent cells such as embryonic stem cells, embryonic  
 CC reproductive cells, embryonic cancer cells or their mutants. Also  
 CC described are: (1) a method of obtaining hybridoma cells by fusing a cell  
 CC with a high ability to produce hybridoma cells (such as mouse A9 cells)  
 CC with a cell containing the foreign chromosomes or fragments (such as  
 CC normal human diploid cells); (2) a method of utilizing pluripotent cells  
 CC to produce chimeric and transgenic non-human animals (especially mammals  
 CC such as mice) which can express the foreign chromosomes or fragments  
 CC introduced; and (3) chimeric animals, their offspring and tissues and  
 CC cells derived from the offspring produced by a method as in (2). The  
 CC inventions can be used for the production of monoclonal antibodies for  
 CC medical use which are of human type and therefore not antigenic in  
 CC humans. They can also be used in the production of chimeric and  
 CC transgenic animals which express useful foreign proteins, or which can  
 CC serve as models for the study of human diseases. AAV52755 to AAV52828 are  
 CC PCR primers used in examples from the present invention  
 XX  
 SQ Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.8; DB 1; Length 22;  
 Best Local Similarity 88.9%; Pred. No. 6.2e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 356 CTGATGGGAGAGTGACC 373  
 Db 3 CTGATGGTGGAGGTGAAC 20  
 RESULT 451  
 AAA10007  
 ID AAA10007 standard; DNA; 22 BP.  
 XX  
 AC AAA10007;  
 XX  
 XX 05-JUL-2000 (first entry)  
 DT  
 XX Primer V $\kappa$ -R for human immunoglobulin gene.  
 DE  
 XX Foreign chromosome; microcell fusion; homologous recombination; antibody;  
 KW targeting vector; transgenic animal; disease model; knockout animal;  
 KW PCR primer; human; ss.  
 XX  
 OS Homo sapiens.  
 XX WO200010383-A1.  
 FN  
 XX

02-MAR-2000. XX  
23-AUG-1999; 99WO-JP004518. XX  
21-AUG-1998; 98JP-00236169. XX  
(KIRI ) KIRIN BEER KK. XX  
Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I; XX  
Kuroiwa Y; XX  
WPI; 2000-246479/21. XX  
Producing a cell containing modified foreign chromosomes, useful for the XX  
Generation of transgenic animals. XX  
Example 95; Page 180; 316pp; Japanese. XX  
The invention relates to a novel method of producing cells containing a XX  
modified foreign chromosome or chromosome fragment. The method comprises: XX  
(a) fusing a microcell comprising the foreign chromosome or chromosome XX  
fragment, with a cell having a high efficiency for homologous XX  
recombination; (b) marking the desired site of insertion of the foreign XX  
chromosome using a targeting vector; and (c) inducing deletion or XX  
translocation at the marked site. Transgenic animals produced by the XX  
method are useful to provide disease models and knockout animals, and in XX  
the production of human proteins, particularly human antibodies. This XX  
sequence is used in the method of the invention XX  
Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other; XX  
Query Match 0.8%; Score 14.8; DB 1; Length 22; XX  
Best Local Similarity 88.9%; Pred. No. 6.2e+02; XX  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0; XX  
QY 356 CTGATGGGGAGAGTGACC 373 XX  
||||| ||||| || XX  
3 CTGATGGTGAGAGTGAAAC 20 XX  
DB XX  
RESULT 452 XX  
AAA09923 XX  
ID AAA09923 standard; DNA; 22 BP. XX  
XX AAA09923; XX  
XX 05-JUL-2000 (first entry) XX  
XX Primer 2 for human immunoglobulin kappa variable region gene Vk3-2. XX  
XX Foreign chromosome; microcell fusion; homologous recombination; antibody XX  
XX targeting vector; transgenic animal; disease model; knockout animal; XX  
XX PCR primer; human; ss. XX  
XX Homo sapiens. XX  
XX WO200010383-A1. XX  
XX 02-MAR-2000. XX  
XX 23-AUG-1999; 99WO-JP004518. XX  
XX 21-AUG-1998; 98JP-00236169. XX  
XX (KIRI ) KIRIN BEER KK. XX  
XX Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I; XX  
XX Kuroiwa Y; XX  
XX WPI; 2000-246479/21. XX  
XX Producing a cell containing modified foreign chromosomes, useful for the XX  
XX generation of transgenic animals. XX  
PT PT

XX Example 1; Page 55; 315pp; Japanese.

XX The invention relates to a novel method of producing cells containing a modified foreign chromosome or chromosome fragment. The method comprises: (a) fusing a microcell comprising the foreign chromosome or chromosome fragment, with a cell having a high efficiency for homologous recombination; (b) marking the desired site of insertion of the foreign chromosome using a targeting vector; and (c) inducing deletion or translocation at the marked site. Transgenic animals produced by the method are useful to provide disease models and knockout animals, and in the production of human proteins, particularly human antibodies. This sequence is used in the method of the invention

XX Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;

SQ Query Match 0.8%; Score 14.8; DB 1; Length 22;  
Best Local Similarity 88.9%; Pred. No. 6.2e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0

Qy 356 CTGATCGGGAGAGTGACC 373  
||||| |||||||  
Db 3 CTGATGGTGAGAGTGAC 20

RESULT 453  
AAH39266  
ID AAH39266 standard; DNA; 22 BP.  
XX AC AAH39266,  
XX DT  
XX 14-AUG-2001 (first entry)  
XX SNP specific lower PCR primer SEQ ID 2062.  
XX Single nucleotide polymorphism; SNP; single nucleotide primer extension;  
XX SNPE; genotyping; agammaglobulinemia; diabetes insipidus; cancer;  
XX Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolemia;  
XX polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;  
XX acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;  
XX inflammation; forensic investigation; paternity analysis; PCR primer; ss.  
XX Homo sapiens.  
XX  
XX W200129262-A2.  
XX 26-APR-2001.  
XX 13-OCT-2000; 2000WO-US028436.  
XX 15-OCT-1999; 99US-0160096P.  
XX (ORCH-) ORCHID BIOSCIENCES INC.  
XX Picoult-Newburg L, Pohl M;  
XX WPI; 2001-290930/30.  
XX New genotyping oligonucleotide, useful for detecting the presence,  
PT absence or identity of single polynucleotide polymorphism in a nucleic  
PT acid sample.  
XX  
XX Claim 1; Page 60; 83pp; English.  
XX Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide  
CC primer extension (SNPE) primers, and the sequences of regions flanking  
CC sites of single nucleotide polymorphisms SNPs. The present invention  
CC includes kits for determining the presence or absence of a SNP, using the  
CC oligonucleotides of the invention. The PCR primers are used to amplify a  
CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.  
CC The oligonucleotides are useful for genotyping a nucleic acid sample by  
CC performing a single-nucleotide primer extension reaction. The  
CC oligonucleotides are useful for determining the presence, absence or



CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to  
CC assess by association analysis the genotype of an individual or group of  
CC individuals, having a pathological phenotypic trait suspected of being  
CC caused by one or more SNPs. Phenotypic traits include diseases e.g.  
CC agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular  
CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,  
CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic  
CC traits also include symptoms of or susceptibility to multifactorial  
CC disease of which a component is or may be genetic such as autoimmune  
CC diseases, including, rheumatoid arthritis, multiple sclerosis,  
CC inflammation, cancer, nervous system diseases and infection by pathogenic  
CC microorganism. The method is also useful in forensic investigations and  
CC paternity analysis. The present sequence represents a PCR primer specific  
CC for a human SNP containing DNA sequence

SQ Sequence 22 BP; 3 A; 7 C; 2 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 22;  
Best Local Similarity 88.9%; Pred. No. 6.2e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1736 GTTCACTGGCCACTGTT 1743  
|||||  
DB 5 GTTCACTGGCCACTTTT 22

## RESULT 454

AAI171720  
ID AAI171720 standard; DNA; 22 BP.

AC AAI171720;

DT 15-JAN-2002 (first entry)

DE PCR primer Vkap3-R.

KW PCR primer; chimeric mouse; chromosome 14; chromosome 22;  
KW antibody heavy chain gene; light chain lambda gene; ss.

OS Synthetic.

PN JP2001231403-A.

XX 28-AUG-2001.

XX 18-FEB-2000; 2000JP-00042074.

XX 18-FEB-2000; 2000JP-00042074.

XX (KIRI ) KIRIN BREWERY KK.

XX WPI; 2001-609926/70.

XX Non-human animals maintaining a modified alien chromosome or its  
XX fragment.

XX Example 9; Page 18; 43pp; Japanese.

XX The present invention relates to a chimeric mouse which carries fragments  
CC of human chromosomes 14 and 22. The chimeric mouse carries the complete  
CC human antibody heavy chain gene from chromosome 14 and the light chain  
CC lambda gene from chromosome 22. The present sequence is a PCR primer,  
CC which was used in an example from the present invention

SQ Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.8; DB 1; Length 22;  
Best Local Similarity 88.9%; Pred. No. 6.2e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 356 CTGATGGGAGAGTGACC 373  
|||||  
DB 3 CTGATGGTGAAGTGAAC 20

## RESULT 455

ABT05572/c

ID ABT05572 standard; DNA; 22 BP.

XX ABT05572;

XX 11-OCT-2002 (first entry)

XX NOVX reverse PCR primer SEQ ID No 246.

XX Cytostatic; antidiabetic; anorectic; metabolic; nootropic; antilipasaemic;  
KW neuroprotective; antiparkinsonian; anticonvulsant; cerebroprotective;  
KW tranquiliser; neuroleptic; antidiabetic; antiulcer; antiinflammatory;  
KW anti-HIV; antiallergic; antirheumatic; antiarthritic; NOVX; diabetes;  
KW metabolic disorder; obesity; infectious disease; Alzheimer's disease;  
KW immune disorder; haematopoietic disorder; dyslipidaemia; chronic disease;  
KW metabolic syndrome X; wasting disorder; cancer; neurological disorder;  
KW epilepsy; stroke; mental disorder; schizophrenic disorders; goiter;  
KW vesicular transport; cystic fibrosis; gastrointestinal disorder;  
KW diabetes mellitus; ulcerative colitis; AIDS; allergic reaction;  
KW multiple sclerosis; rheumatoid arthritis; transgenic animal;  
KW gene therapy; PCR; primer; ss.

XX Unidentified.

XX WO200246409-A2.

XX 13-JUN-2002.

XX 06-DEC-2001; 2001WO-US046586.

XX 06-DEC-2000; 2000US-0251660P.

XX 12-DEC-2000; 2000US-0255029P.

XX 08-JAN-2001; 2001US-0260326P.

XX 24-JAN-2001; 2001US-0263800P.

XX 20-FEB-2001; 2001US-0269942P.

XX 24-APR-2001; 2001US-0286183P.

XX 20-AUG-2001; 2001US-0313627P.

XX 12-SEP-2001; 2001US-0318712P.

XX (CURA-) CURAGEN CORP.

XX Guo X, Li L, Patturajan M, Shimkets RA, Casman SJ, Malyankar UM;

XX Therneer VT, Vernet CAM, Spytek KA, Shenoy SG, Alsobrook JP;

XX Edinger S, Peyman JA, Stone DJ, Ellerman K, Gangolli EA, Boldog FL;

XX Colman SD, Eisen AJ, Liu X, Padigaru M, Spaderna SK, Zerhusen BD;

XX WPI; 2002-547774/58.

XX Novel isolated polypeptide, designated NOVX, useful for treating or

XX preventing cancer, diabetes, obesity, dyslipidemia, anorexia, and

XX metabolic, neurodegenerative, immune and hematopoietic disorders.

XX Example 2; Page 372; 421pp; English.

XX The invention relates to an isolated polypeptide, designated NOVX,

XX comprising a sequence fully defined in the specification. The isolated

XX protein, its encoding polynucleotide or an antibody created from the

XX protein is useful in the manufacture of a medicament for treating a

XX syndrome associated with a human disease, preferably a NOVX-associated

XX disorder, or for treating or preventing a NOVX-associated disorder in a

XX subject, preferably human. The isolated protein, its encoding

XX polynucleotide or an antibody created from the protein are also useful

XX for treating or preventing metabolic disorders, diabetes, obesity,

XX infectious disease, anorexia, neurodegenerative disorder, Alzheimer's

XX disease, Parkinson's disorder, immune disorders, haematopoietic

XX disorders, and various dyslipidaemias, metabolic disturbances associated

XX with obesity, the metabolic syndrome X, wasting disorders associated with

XX chronic diseases, and cancer. The isolated protein, its encoding

XX polynucleotide or an antibody created from the protein are useful for

CC treating or preventing neurological disorders such as epilepsy, stroke,  
CC mental disorders including mood, anxiety, schizophrenic disorders,  
CC disorders of vesicular transport such as cystic fibrosis, diabetes  
CC mellitus, goiter, gastrointestinal disorders including ulcerative  
CC colitis, other conditions associated with abnormal vesicle trafficking  
CC including AIDS, allergic reactions, multiple sclerosis and rheumatoid  
CC arthritis. A cell comprising the vector of the invention is useful for  
CC producing non-human transgenic animals. The polynucleotide of the  
CC invention can be used to treat disorders by gene therapy. This  
CC polynucleotide sequence represents a reverse PCR primer for the  
CC amplification of a sequence relating to the NOVX proteins of the  
CC invention  
XX  
SQ Sequence 22 BP; 9 A; 3 C; 6 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.8; DB 1; Length 22;  
Best Local Similarity 88.9%; Pred. No. 6.2e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1230 ACAGCTACACTTCACCTT 1247  
Db 18 ACAGCTGCGCTTCATCTT 1  
  
RESULT 456  
ACD19499/C  
ID ACD19499 standard; DNA; 22 BP.  
XX  
AC ACD19499;  
XX  
DT 25-AUG-2003 (first entry)  
XX  
DE Novel human protein associated PCR primer #5.  
XX  
KW Human; NOVX; gene therapy; endocrine related disease; diabetes;  
KW metabolism-related disease; obesity; central nervous system disorder;  
KW Alzheimer's disease; Parkinson's disease; epilepsy; multiple sclerosis;  
KW schizophrenia; depression; autoimmune disorder; inflammatory disorder;  
KW psoriasis; allergy; lupus erythematosus; asthma; cancer;  
KW inflammatory bowel disease; rheumatoid arthritis; osteoarthritis;  
KW colon cancer; lung cancer; liver cancer; breast cancer; ovarian cancer;  
KW prostate cancer; brain cancer; melanoma; liver disease; liver cirrhosis;  
KW lung disease; emphysema; obstructive pulmonary disease; haemophilia;  
KW stroke; infection; PCR; primer; ss.  
XX  
OS Homo sapiens.  
XX  
XX  
PN WO2003023002-A2.  
XX  
PD 20-MAR-2003.  
XX  
PF 09-SEP-2002; 2002WO-US028539.  
XX  
PR 07-SEP-2001; 2001US-0318120P.  
PR 07-SEP-2001; 2001US-0318130P.  
PR 10-SEP-2001; 2001US-0318430P.  
PR 17-SEP-2001; 2001US-0322836P.  
PR 17-SEP-2001; 2001US-0322781P.  
PR 17-SEP-2001; 2001US-0322817P.  
PR 19-SEP-2001; 2001US-0323519P.  
PR 20-SEP-2001; 2001US-0323631P.  
PR 20-SEP-2001; 2001US-0323636P.  
PR 25-SEP-2001; 2001US-0324969P.  
PR 25-SEP-2001; 2001US-0325091P.  
PR 26-SEP-2001; 2001US-0324990P.  
PR 17-APR-2002; 2002US-0373212P.  
PR 06-SEP-2002; 2002US-00236177.  
XX  
XX  
PA (CURA-) CURAGEN CORP.  
XX  
PI Spytek KA, Patturajan M, Gorman L, Li L, Anderson DW, Zhong M;  
PI Gerlach VL, Vernet CAM, Ellerman K, Berghs C, Rothenberg ME, Guo X;

PI Shimkets RA, Leach MD, Catterton E, Kekuda R, Ji W, Miller CE;  
PI Rieger DK, Taupier RJ, Shenoy SG, Liu X, Padigaru M, Alsobrook JP;  
XX Lepley DM, Edinger SR, Burgess CE;  
DR WPI; 2003-313242/30.  
XX  
XX New cytoplasmic, nuclear membrane bound or secreted polypeptides (NOVX)  
PT and polynucleotides, useful in gene therapy, e.g. for treating or  
PT preventing obesity, multiple sclerosis, allergy, cancers, hemophilia,  
PT stroke or infections.  
XX  
PS Example 92; Page 465; 586pp; English.  
XX  
XX The invention describes a new isolated polypeptide (NOVX). The NOVX  
CC polypeptide, nucleic acid and antibody are useful as therapeutics,  
CC particularly in the manufacture of a medicament for treating a syndrome  
CC associated with a human disease, which includes a pathology associated  
CC with NOVX polypeptide. The DNA encoding the protein is useful in gene  
CC therapy for treating the disease or condition. In particular, the NOVX  
CC polypeptide or polynucleotide is useful for treating endocrine/  
CC metabolism-related diseases (e.g. obesity or diabetes), central nervous  
CC system disorders (e.g. Alzheimer's disease, Parkinson's disease,  
CC epilepsy, multiple sclerosis, schizophrenia or depression), autoimmune  
CC and inflammatory disorders (e.g. psoriasis, allergy, lupus erythematosus,  
CC asthma, inflammatory bowel disease, rheumatoid arthritis or  
CC osteoarthritis), cancers (e.g. colon, lung, liver, breast, ovarian,  
CC prostate or brain cancers, or melanoma), liver diseases (e.g. liver  
CC cirrhosis), lung diseases (emphysema or obstructive pulmonary disease),  
CC haemophilia, stroke, or infections (e.g. viral, bacterial or parasitic).  
CC These are also useful in developing powerful assay system for functional  
CC analysis of various human disorders, as well as in diagnostic  
CC applications, and for monitoring the effects of drugs during clinical  
CC trials. This sequence represents a primer used to isolate DNA encoding  
CC novel human NOV proteins  
XX  
SQ Sequence 22 BP; 10 A; 7 C; 3 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.8; DB 1; Length 22;  
Best Local Similarity 88.9%; Pred. No. 6.2e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1400 TGTTCACATTTGAGGGTC 1417  
Db 19 TGTTCACATTTGAGGGTC 2  
  
RESULT 457  
ABX72335  
ID ABX72335 standard; DNA; 22 BP.  
XX  
AC ABX72335;  
XX  
DT 03-JUN-2003 (first entry)  
XX  
XX Human NOVX DNA PCR primer #40.  
XX  
KW Human; NOVX; PCR; ss; metabolic disorder; cardiomyopathy; diabetes; ASD;  
KW hypertension; congenital heart defect; aortic stenosis; valve disease;  
KW atrial septal defect; atrioventricular canal defect; ductus arteriosus;  
KW pulmonary stenosis; subaortic stenosis; ventricular septal defect; VSD;  
KW tuberculous sclerosis; scleroderma; atherosclerosis; infectious disease;  
KW obesity; anorexia; neurodegenerative disorder; Alzheimer's disease;  
KW Parkinson's disease; immune disorder; haematopoietic disorder; primer;  
KW haemophilia; hypercoagulation; Crohn's disease; cancer.  
XX  
XX Homo sapiens.  
XX  
XX WO200281498-A2.  
XX  
XX 17-OCT-2002.  
XX  
XX 03-APR-2002; 2002WO-US010780.



KW transcription; translation; truncation; site-directed mutagenesis;  
KW prokaryote; open reading frame; primer; amplification; ss.

OS Synthetic.  
OS Homo sapiens.

XX US5863770-A.

XX 26-JAN-1999.

XX 21-FEB-1996; 96US-00604488.

XX 22-AUG-1989; 89US-00396894.

XX 24-AUG-1989; 89US-00399945.

XX 31-AUG-1989; 89US-00401609.

XX 21-SEP-1990; 90GB-00020632.

XX 12-APR-1993; 93US-00030081.

XX (HSCR-) HSC RES & DEV LP.

XX Tsui L, Rommens JM;

XX WPI; 1992-150482/18.

XX Modified DNA sequence - derived from gene coding for cystic fibrosis

XX Trans:membrane conductance regulator protein.

XX Disclosure; Fig 7; 36pp; English.

XX The invention relates to a recombinant human cystic fibrosis  
XX transmembrane conductance regulator (CFTR) gene used for the expression  
XX and production of the CFTR protein in bacteria. Production of the full  
XX length CFTR protein in bacterial systems has been hampered by a region in  
XX exon 6 which is homologous to the -35 and -10 boxes of prokaryotic  
XX transcription systems, and may lead to incorrect transcription and  
XX translation resulting in a truncated CFTR protein which may be toxic to  
XX bacteria. The method of the invention comprises site-directed mutagenesis  
XX of this region of exon 6 to remove homology with the prokaryotic  
XX transcriptional start signals without affecting the encoded amino acids  
XX of the reading frame. Primers AAX04445-X04448 were used for the site-  
XX directed mutagenesis of exon 6

SQ Sequence 21 BP; 7 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;

Best Local Similarity 81.0%; Pred. No. 6.4e+02;

Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1530 GCTACAAAGGAGGCGAGCCT 1550

Db 1 GCTACCAAGCAGTACAGCCT 21

RESULT 460

AAQ36678

ID AAQ36678 standard; cDNA; 21 BP.

AC AAQ36678;

XX 25-MAR-2003 (revised)

DT 09-JUN-1993 (first entry)

XX Potato PPO primer #4.

XX Polyphenol oxidase; PPO; catalyst; browning; fruit; plastid; vacuole;  
KW transform; coffee; tea; black olives; grapevine; chloroplast; apple;  
KW transit peptide; recombinant plasmid; PCR; primer; amplify; broad bean;  
KW potato; polymerase chain reaction; ss.

XX Synthetic.

XX WO9302195-A1.

XX

PD 04-FEB-1993.

XX 16-JUL-1992; 92WO-AU000356.

XX 17-JUL-1991; 91AU-00007248.

XX (CSIR ) COMMONWEALTH SCI & IND RES ORG.

XX Robinson SP, Dry IB;

XX WPI; 1993-058792/07.

XX DNA encoding polyphenol oxidase polypeptide or fragment - useful for  
XX modifying the oxidase activity in fruit and vegetables to decrease or  
XX enhance browning.

XX Claim 20; Page 24; 44pp; English.

XX The sequences given in AAQ36670-78 are primers which were used in the  
XX isolation and cloning of the polyphenol oxidase (PPO) enzyme genes from  
XX various plants. The PPO genes were isolated, and recombinant plasmids for  
XX transformation of plant cells were produced by PCR using these primers.  
XX PPO is thought to be the predominant catalyst in browning of fruit caused  
XX by injury or damage. PPO is localised in the plastids of plant cells  
XX whereas the phenolic substrates of the enzyme are stored in the plant  
XX cell vacuole. This compartmentation prevents the browning reaction from  
XX occurring unless the plant cells are damaged and the enzyme and the  
XX substrate are mixed. The PPO gene sequences could be used to construct  
XX synthetic genes which may be used to transform plants to decrease  
XX expression of the enzyme gene. In some instances, eg. coffee, tea, black  
XX olives etc., it is desirable to increase the level of PPO to produce  
XX desired levels of browning or changes in flavour compounds. The grapevine  
XX PPO gene codes for an additional 103 amino acids upstream of the N-  
XX terminus of the mature protein. This region has the properties of a  
XX chloroplast transit peptide and is most likely responsible for targeting  
XX of the protein to be imported into the chloroplast and processed to  
XX produce mature PPO. Transformation of plants with this gene may therefore  
XX result in correct targeting and maturation of the grapevine PPO in other  
XX species and result in accumulation of active grapevine PPO enzyme in the  
XX plastids of these tissues. (Updated on 25-MAR-2003 to correct FN field.)

SQ Sequence 21 BP; 5 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;

Best Local Similarity 81.0%; Pred. No. 6.4e+02;

Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 998 TCTCATCAACGAGAGGGGAG 1018

Db 1 TCTCATCAACTGGAGTTGAG 21

RESULT 461

AAQ61708/c

ID AAQ61708 standard; cDNA; 21 BP.

XX AAQ61708;

XX 25-MAR-2003 (revised)

DT 21-OCT-1994 (first entry)

XX HEV strain BUR-121 primer R193.

XX Hepatitis E virus; HEV; strain SAR-55; open reading frame; ORF; PCR;  
KW antibody; detection; diagnosis; primates; stool suspension; amplify;  
KW polymerase chain reaction; primer; burma; strain BUR-121; ss.

OS Synthetic.

XX WO9406913-A2.

XX 31-MAR-1994.

XX

PF 17-SEP-1993; 93WO-US008849.  
XX  
PR 18-SEP-1992; 92US-00947263.  
XX  
XX (USSH ) US SEC DEPT HEALTH.  
XX Tsarev SA, Emerson SU, Purcell RH;  
XX WPI; 1994-118462/14.  
XX Purified hepatitis E strain SAR-55 virus - used to develop prods. for use  
PT in detection, diagnosis, vaccines and therapy of hepatitis E virus  
PT infection.  
PT  
XX Example 1; Page 38; 114pp; English.  
XX  
XX The sequences given in AAQ45198-200 and AAQ61687-777 are primers which  
CC were used in the isolation and amplification of the genomic sequence of  
CC the hepatitis E virus (HEV) strain SAR-55. These primers were based on  
CC sequences derived from the SAR-55 strain and a strain from Burma (BUR-  
CC 121). The amplified sequence contains three open reading frames (ORFs).  
CC The proteins encoded by this sequence can be used to stimulate the  
CC production of protective antibodies upon injection into a mammal that  
CC would serve to protect the mammal upon challenge with wild type HEV. The  
CC proteins can be used for detection and diagnosis of HEV infection. This  
CC cDNA was isolated from primates inoculated with stool suspensions  
CC obtained from hepatitis E patients. (Updated on 25-MAR-2003 to correct PN  
CC field.)  
XX  
SQ Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.6; DB 1; Length 21;  
Best Local Similarity 81.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 814 CACACGGAGAGTCCCTCACC 834  
DB 21 CACACTGAGAGTGGTCATC 1  
  
RESULT 462  
AAQ95568  
ID AAQ95568 standard; DNA; 21 BP.  
XX  
XX AAQ95568;  
XX  
XX 14-FEB-1996 (first entry)  
XX  
XX Primer B2 (Group 4, set A) for a human chromosomal marker.  
XX  
XX Primer: polymerase chain reaction; PCR; linkage study; locus;  
KW microsatellite marker sequence; automated genotyping; allele;  
KW polymorphism; detection; Homo sapiens; ss.  
XX  
XX Synthetic.  
XX  
XX WO9515400-A1.  
XX  
XX 08-JUN-1995.  
XX  
XX 05-DEC-1994; 94WO-US013945.  
XX  
XX 03-DEC-1993; 93US-00160837.  
XX  
XX (UJJO ) UNIV JOHNS HOPKINS.  
XX  
XX Levitt RC;  
XX  
XX WPI; 1995-215278/28.  
XX  
XX Kit for automated genotyping contg. pairs of PCR primers - designed to  
PT amplify polymorphic nucleotide repeat sequences, arranged in sets each  
PT with a characteristic fluorescence label, useful e.g. in detection of

PT disease related genetic rearrangement.  
XX  
PS Disclosure; Fig 7D-3; 104pp; English.  
XX  
XX The method aims to provide a collection of highly reproducible  
CC microsatellite marker sequences (MMS) at approx. 10-50 cm intervals  
CC throughout the human genome which can be detectably labelled. The MMS are  
CC polymorphic, simple sequence repeats and can be used in automated  
CC genotyping, esp. fluorescence-based. The primers correspond to the unique  
CC DNA sequence surrounding each marker, and PCR is used to detect each  
CC polymorphism. When the MMS show considerable polymorphism (ie. a  
CC difference in the number of repeats) between individuals, the markers can  
CC be particularly informative. The MMS can be ideal for linkage studies.  
CC Kits comprise at least 4 groups, of at least 3 sets, each comprising  
CC labelled primers for PCR amplification of the DNA. Group 4 primer pairs  
CC are shown in AAQ95465-480 and AAQ95559-590. The chromosomal markers,  
CC published size range of the allele and degree of heterozygosity in the  
CC population for the markers covered by these primer pairs are not given in  
CC the specification  
XX  
SQ Sequence 21 BP; 9 A; 2 C; 5 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.6; DB 1; Length 21;  
Best Local Similarity 81.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 4 AAGCAGCGCTAAGGATGGACA 24  
DB 1 AAGCATCTTAATGGATGGAAA 21  
  
RESULT 463  
AAT27419/c  
ID AAT27419 standard; DNA; 21 BP.  
XX  
XX AAT27419;  
XX  
XX 27-NOV-1996 (first entry)  
XX  
XX HEV strain Burma-121 derived reverse primer 193 (ORF-1).  
XX  
XX Hepatitis E virus; HEV; SAR-55 strain; enteric transmission;  
KW structural region; antigen; detection; antibody; vaccine; immunisation;  
KW infection; Burma-121 strain; primer; polymerase chain reaction; ss.  
XX  
XX Synthetic.  
XX  
XX WO9610560-A2.  
XX  
XX 11-APR-1996.  
XX  
XX 03-OCT-1995; 95WO-US013102.  
XX  
XX 03-OCT-1994; 94US-00316765.  
XX  
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
XX  
XX Tsarev SA, Emerson SU, Purcell RH;  
XX  
XX WPI; 1996-209320/21.  
XX  
XX Isolated and purified hepatitis E virus strain SAR-55 DNA - encodes  
PT antigenic protein useful in diagnosis, prophylaxis and treatment of  
PT hepatitis E virus infection.  
XX  
XX Example 1; Page 40; 121pp; English.  
XX  
XX The present sequence is a hepatitis E virus (HEV) strain Burma-121  
CC derived primer, used in the isolation of the HEV strain SAR-55 cDNA. The  
CC HEV strain SAR-55 was implicated in an enterically transmitted non-A, non  
CC -B hepatitis in Pakistan. The protein encoded by the structural region of  
CC the virus (i.e. ORF-2), which is capable of forming HEV like particles,  
CC is useful for the detection of HEV antibodies (pref. IgG or IgM) in

CC blood, plasma, sera, cerebrospinal fluid, tissue, urine or pleural fluid.  
 CC The protein, and anti-HEV antibodies generated using the protein, can  
 CC also be used in vaccines for immunising an animal against HEV infection.  
 CC The protein is identified as a band of greater than 50 kD following SDS-  
 CC PAGE of cell lysates of insect cells infected with a HEV ORF-2 contg.  
 CC baculovirus, i.e. the claimed recombinant expression vectors pPIC9-1779,  
 CC -1780 and -1781  
 XX  
 SQ Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.6; DB 1; Length 21;  
 Best Local Similarity 81.0%; Pred. No. 6.4e+02;  
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 814 CACACGAGAGTCCCTCACC 834  
 DB 21 CACACTGAGAGTGGTCAATC 1  
 RESULT 464  
 AAV71629/C  
 ID AAV71629 standard; DNA; 21 BP.  
 XX  
 AC AAV71629;  
 XX  
 XX 02-FEB-1999 (first entry)  
 XX  
 DE HEV ORF proteins encoding DNA amplifying primer R 193 B.  
 XX  
 KW Hepatitis E virus; HEV; SAR-55; diagnostic agent; vaccine; antibody;  
 KW passive immunisation; open reading frame; ORF; PCR primer; ss.  
 XX  
 XX Synthetic.  
 OS Hepatitis E virus.  
 XX  
 PN WO9846761-A1.  
 XX  
 PD 22-OCT-1998.  
 XX  
 PF 09-APR-1998; 98WO-US007418.  
 XX  
 PR 11-APR-1997; 97US-00840316.  
 XX  
 XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
 XX  
 XX Emerson SU, Purcell RH, Tearev SA, Robinson RA;  
 XX WPI; 1998-568733/48.  
 XX  
 XX New Hepatitis E virus DNA from Pakistani strain SAR-55 - used for, e.g.  
 PT developing products for diagnosis of, and vaccination against hepatitis E  
 PT virus infection.  
 XX  
 PS Example 1; Page 42; 204pp; English.  
 CC  
 CC Sequences AAV71605 to AAV71698 represent primers used for PCR  
 CC amplification of the hepatitis E virus (HEV) DNA SAR-55 encoding the open  
 CC reading frame (ORF) proteins ORF-1, ORF-2 and ORF-3. A host organism  
 CC transformed or transfected with a recombinant expression vector  
 CC containing the SAR-55 nucleic acid can be used to produce the HEV  
 CC proteins, especially ORF-2 protein. The recombinant HEV proteins can be  
 CC used as diagnostic agents and as vaccines for use against HEV infection.  
 CC The detection of antibodies specific for HEV can be used for the  
 CC diagnosis of infection and diseases caused by HEV, and for monitoring the  
 CC progression of such disease. Such methods are also useful for monitoring  
 CC the efficacy of therapeutic agents during the course of treatment of HEV  
 CC infection and disease in a mammal. The antibodies can be used for  
 CC detection or for passive immunisation of mammals  
 XX  
 SQ Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.6; DB 1; Length 21;  
 Best Local Similarity 81.0%; Pred. No. 6.4e+02;

Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 814 CACACGAGAGTCCCTCACC 834  
 DB 21 CACACTGAGAGTGGTCAATC 1  
 RESULT 465  
 AAV38621/C  
 ID AAV38621 standard; DNA; 21 BP.  
 XX  
 AC AAV38621;  
 XX  
 DT 13-OCT-1998 (first entry)  
 XX  
 DE Human ICAM-1, E-selectin, VCAM-1 antisense oligonucleotide.  
 XX  
 KW ICAM-1; intracellular adhesion molecule-1; E-selectin; VCAM-1;  
 KW vascular cell adhesion molecule-1; antisense; inflammatory disease;  
 KW treatment; septic shock; psoriasis; wounds; burns; acne; arthritis;  
 KW organ rejection; inhibition; expression; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 PN WO9824797-A1.  
 XX  
 PD 11-JUN-1998.  
 XX  
 PF 02-DEC-1996; 96WO-US019194.  
 XX  
 PR 02-DEC-1996; 96WO-US019194.  
 XX  
 PA (DYAD-) DYAD PHARM CORP.  
 XX  
 PI Hoke GD, Bradley MO, Williams TJ, Lee C;  
 XX WPI; 1998-333253/29.  
 XX  
 DR Antisense oligonucleotides to ICAM-1, E-selectin or VCAM-1 - useful for  
 PT treating diseases having an inflammatory component, e.g. psoriasis,  
 PT wounds and septic shock.  
 XX  
 PS Claim 8; Page 40; 48pp; English.  
 XX  
 CC The sequence is that of an antisense oligonucleotide which is  
 CC substantially complementary to at least a portion of the pre- or mature  
 CC RNA transcript of human intracellular adhesion molecule (ICAM), E-  
 CC selectin or vascular cell adhesion molecule (VCAM). It can be used to  
 CC inhibit expression of these proteins. Inhibition of these proteins forms  
 CC the basis for treatment of conditions and diseases that have an  
 CC inflammatory component, e.g. acne, psoriasis, arthritis, organ rejection,  
 CC wounds, burns, septic shock or inflammatory complications of septic shock  
 XX  
 SQ Sequence 21 BP; 3 A; 14 C; 0 G; 4 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.6; DB 1; Length 21;  
 Best Local Similarity 81.0%; Pred. No. 6.4e+02;  
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 225 TCAGAGTGGTGGTGGCGG 245  
 DB 21 TCAGAGGGGAGTGGTGGGG 1  
 RESULT 466  
 AAZ26779  
 ID AAZ26779 standard; DNA; 21 BP.  
 XX  
 AC AAZ26779;  
 XX  
 DT 30-NOV-1999 (first entry)  
 XX

DE Human polymorphic region 968.  
 XX Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;  
 KW cell viability; loss of heterozygosity; precancerous condition; ASI;  
 KW allele specific inhibitor; somatic cell; diagnosis; prevention;  
 KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;  
 KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;  
 KW graft versus host disease; malignant cell removal; bone marrow; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO9841648-A2.  
 FN  
 XX 24-SEP-1998.  
 PD  
 XX 19-MAR-1998; 98WO-US005419.  
 PF  
 XX 20-MAR-1997; 97US-0041057P.  
 PR  
 XX (VARI-) VARIAGENICS INC.  
 PA  
 XX Housman D, Ledley PD, Stanton VP;  
 XX  
 XX WPI; 1998-521232/44.  
 DR  
 XX Identifying target genes for allele-specific drugs - used for diagnosis,  
 PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,  
 PT dysplastic lesions, endometriosis or graft versus host disease.  
 XX  
 XX Disclosure; Fig 7; 605pp; English.  
 PS  
 XX This invention describes a novel method for identifying an inhibitor  
 CC potentially useful for treatment of cancer, where the inhibitor is active  
 CC on a gene vital for cell growth or viability, and where the gene is  
 CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is  
 CC used for preventing the development of cancer in a patient having a  
 CC precancerous condition, by administering to the patient a first allele  
 CC specific inhibitor (ASI) targeted to an allele of a first essential gene  
 CC present in cells of the precancerous condition, where the normal somatic  
 CC cells of the patient are heterozygous for the first gene, the inhibitor  
 CC is active on at least one but less than all allelic forms of the gene  
 CC present in a population and targets only one allelic form present in the  
 CC normal somatic cells, and the first gene. The products and methods can be  
 CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.  
 CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic  
 CC lesions, benign tumours, endometriosis, polycystic kidney disease, and  
 CC graft versus host disease. The method can also be used to remove  
 CC malignant cells from bone marrow transplants. AAZ25812-226925 represent  
 CC human polymorphic sites described in the method of the invention  
 XX  
 XX Sequence 21 BP; 9 A; 5 C; 7 G; 0 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 14.6; DB 1; Length 21;  
 Best Local Similarity 81.0%; Pred. No. 6.4e+02;  
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1613 AAGCCACAGACGAGGCCCA 1633  
 DB 1 AAGACACAGAGAGGCCCA 21  
 RESULT 467  
 AAX79667/c  
 ID AAX79667 standard; DNA; 21 BP.  
 XX  
 XX AAX79667;  
 AC  
 XX 12-AUG-1999 (first entry)  
 DT  
 XX Human LKB1 gene primer/probe.  
 DE  
 XX LKB1 gene; human; serine protease; Peutz-Jeghers syndrome; PJ syndrome;  
 KW variation detection; therapy; diagnosis; primer; probe; ss.

XX Synthetic.  
 OS Homo sapiens.  
 OS  
 FN WO9928459-A1.  
 XX  
 XX 10-JUN-1999.  
 PD  
 XX 27-NOV-1998; 98WO-JP005357.  
 PF  
 XX 27-NOV-1997; 97JP-00344256.  
 PR 01-OCT-1998; 98JP-00280357.  
 XX  
 XX (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.  
 PA  
 XX Jenne DE, Nezu J;  
 PI  
 XX WPI; 1999-358129/30.  
 DR  
 XX Primers and probes for use in diagnosis of Peutz-Jeghers syndrome.  
 FT  
 XX Claim 2; Page 95; 107pp; Japanese.  
 PS  
 XX This sequence represents a primer/probe sequence of the invention. The  
 CC primer and probe sequences are derived from the sequence of the human  
 CC serine protease gene LKB1, and are used to detect variations in LKB1  
 CC leading to Peutz-Jeghers (PJ) syndrome. The primers and probes can be  
 CC used for the diagnosis, investigation and treatment of diseases in which  
 CC variations in the LKB1 gene are implicated, such as PJ syndrome  
 XX  
 XX Sequence 21 BP; 3 A; 2 C; 10 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 14.6; DB 1; Length 21;  
 Best Local Similarity 81.0%; Pred. No. 6.4e+02;  
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 814 CACACGAGAGAGTCCCTCACC 834  
 DB 21 CACACGAGAGTCCCTCACC 1  
 RESULT 468  
 AAX09079/c  
 ID AAX09079 standard; DNA; 21 BP.  
 XX  
 XX AAX09079;  
 AC  
 XX 14-JUN-1999 (first entry)  
 DT  
 XX Tumour necrosis factor alpha antisense oligonucleotide.  
 DE  
 XX Tumour necrosis factor alpha; TNF-alpha; antisense oligonucleotide; ASO;  
 KW inhibition; expression; treatment; disease; disorder; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 XX WO9901139-A1.  
 PN  
 XX 14-JAN-1999.  
 PD  
 XX 02-JUL-1998; 98WO-US013711.  
 PF  
 XX 03-JUL-1997; 97US-0051705P.  
 PR  
 XX (UYJE-) UNIV JEFFERSON THOMAS.  
 PA  
 XX Tu G, Israel Y;  
 PI  
 XX WPI; 1999-105767/09.  
 DR  
 XX Generation of antisense oligonucleotides - by specifically targeting a  
 PT GCGA motif found in mRNA sequences.  
 PT

XX Example 2; Page 37; 55pp; English.

XX Antisense oligonucleotides (ASO) for inhibiting a tumour necrosis factor-

XX alpha (TNF-alpha) gene in an animal, preferably a human, comprise 12-50

XX nucleotides, 90% of which are complementary to a region of mRNA

XX containing a GGGA sequence motif. The ASO is used to inhibit expression

XX of a gene in an animal and for treating the animal when afflicted with a

XX disease or disorder characterised by the presence of an mRNA from a gene

XX containing a GGGA motif. The ASO are specifically targeted to a GGGA

XX sequence motif found in mRNA from a gene. A study of known ASO has shown

XX that at least half of the most efficacious ASO's contain one or more TCCC

XX motifs. This ASO comprises a TCCC motif followed by a cytosine residue

XX and corresponds to a region of the human ICM-1 3' untranslated region

XX

XX Sequence 21 BP; 3 A; 14 C; 0 G; 4 T; 0 U; 0 Other;

XX

Query Match 0.8%; Score 14.6; DB 1; Length 21;

Best Local Similarity 81.0%; Pred. No. 6.4e+02;

Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 225 TGAGAGTGTGGTGGTGGCGG 245

Db 21 TGAGAGGGGAAGTGGTGGGG 1

RESULT 469

AAZ57835

ID AAZ57835 standard; DNA; 21 BP.

AC AAZ57835;

XX 11-APR-2000 (first entry)

XX

XX HSV-2 ICP6 gene probe used in TagMan analysis.

XX

XX Fine array transcript mapping; FAT mapping; FATmap; HSV-2;

XX differential expression; ICP6 gene; probe; ss.

XX

XX Herpes simplex virus 2.

XX

XX WO9967422-A1.

XX

XX 29-DEC-1999.

XX

XX 18-JUN-1999; 99WO-US013813.

XX

XX 24-JUN-1998; 98US-0090464P.

XX

XX (SMK ) SMITHKLINE BEECHAM CORP.

XX

XX Leary JJ, Tal-Singer R;

XX

XX WPI; 2000-147217/13.

XX

XX Novel analytical method designated Fine Array Transcript Mapping, useful

XX for detecting and measuring RNA molecules transcribed from a genome,

XX differential expression, and sequence mapping.

XX

XX Example 1; Page 17; 53pp; English.

XX

XX This sequence represents a probe targeted at the ICP6 gene of herpes

XX simplex virus type 2 (HSV-2) SB5 (ATCC VR 2546). It was used as a TagMan

XX probe in quantitative analysis of the HSV-2 genome. The invention provides

XX a novel genetic analysis method termed Fine Array Transcript Mapping (FAT

XX Mapping) for detecting and measuring RNA molecules transcribed from a

XX genome, differential expression, and mapping of the 5' sequence of a

XX transcript. FAT mapping involves probing a test grid containing an array

XX of 100s to 1000s of overlapping genomic clones or DNA fragments with

XX probes consisting of labeled cDNAs representing the RNA transcripts from

XX test populations. The system allows quantitative measurements of the

XX expression of rare transcripts, and enables the analysis of 100s of genes

XX within a genomic sequence in a single run. The method can be used to

CC measure the differential expression of transcripts between 2 or more

CC different viral, tissue or cell populations which share a common genomic

CC sequence, or to determine whether a particular open reading frame is

CC expressed under certain conditions. The FATMap technique has been applied

CC to the HSV-2 genome

XX

XX Sequence 21 BP; 4 A; 10 C; 4 G; 3 T; 0 U; 0 Other;

XX

Query Match 0.8%; Score 14.6; DB 1; Length 21;

Best Local Similarity 81.0%; Pred. No. 6.4e+02;

Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 550 AAGCCCTCAGCCGCGCTC 570

Db 1 AAGCCCTGATCCGCACTC 21

RESULT 470

AAZ75780

ID AAZ75780 standard; DNA; 21 BP.

XX

XX AAZ75780;

XX

XX 10-SEP-2001 (first entry)

XX

XX Human biallelic marker downstream amplification primer SEQ ID NO:10136.

XX

XX Human genome; biallelic marker; high density disequilibrium map;

XX genomic map; haplotype; polymorphic base; genotyping;

XX haplotyping; hybridisation; identification; characterisation;

XX amplification; single nucleotide polymorphism; SNP; PCR primer;

XX diagnosis; ss.

XX

XX Homo sapiens.

XX

XX WO9954500-A2.

XX

XX 28-OCT-1999.

XX

XX 21-APR-1999; 99WO-IB000822.

XX

XX 21-APR-1998; 98US-0082614P.

XX

XX 23-NOV-1998; 98US-0109732P.

XX

XX (GEST ) GENSET.

XX

XX Cohen D, Blumenfeld M, Chumakov I;

XX

XX WPI; 2000-013267/01.

XX

XX Novel biallelic markers used to construct a high density disequilibrium

XX map of the human genome.

XX

XX Claim 9; Page 2391; 2745pp; English.

XX

XX AA265654 to AA269578 represent human biallelic markers from the present

XX invention, which contain a polymorphic base at position 24 of their

XX nucleotide sequences. AA269579 to AA277440 represent amplification

XX primers for the biallelic markers. The biallelic markers of the invention

XX have a variety of uses: they can be used for high density mapping of the

XX human genome, and in complex association studies and haplotyping studies

XX which are useful in determining the genetic basis for disease states.

XX Compositions and methods of the invention can also be useful for the

XX identification of the targets for the development of pharmaceutical

XX agents and diagnostic methods, as well as the characterisation of the

XX differential efficacious responses to and side effects from

XX pharmaceutical agents acting on a disease as well as other treatment.

XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and

XX 3367, are not actually given a sequence in the sequence listing from the

XX present invention

XX

XX Sequence 21 BP; 8 A; 6 C; 3 G; 4 T; 0 U; 0 Other;



```
Query Match          0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1060 ATCCCAACAAAGACATATCC 1080
Db 1 ATCCCTACAGAGATAATCC 21

RESULT 471
AAZ73450/c
ID AAZ73450 standard; DNA; 21 BP.
XX
AC AAZ73450;
XX
DT 10-SEP-2001 (first entry)
XX
DE Human biallelic marker upstream amplification primer SEQ ID NO:7806.
XX
KW Human genome; biallelic marker; high density disequilibrium map;
KW Genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW Haplotyping; hybridisation; identification; characterisation;
KW Amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
OS Homo sapiens.
XX
FN WO9554500-A2.
XX
PD 28-OCT-1999.
XX
PF 21-APR-1999; 99WO-IB000822.
XX
PR 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX
PA (GEST ) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
XX
WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX
PS Claim 9; Page 1895; 2745pp; English.
XX
CC AAZ56554 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
SQ Sequence 21 BP; 2 A; 1 C; 9 G; 9 T; 0 U; 0 Other;

Query Match          0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 429 CAACCATCCCCACGCAAGAT 449
Db 21 CAACCAACCAACACATCAAGAT 1
```

```
RESULT 472
AAC80113/c
ID AAC80113 standard; DNA; 21 BP.
XX
AC AAC80113;
XX
DT 03-MAY-2001 (first entry)
XX
DE Reverse primer #25 used for amplification of HLA-A exon 2.
XX
KW HLA-A; HLA-B; HLA-C; typing; primer; human; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200061795-A2.
XX
PD 19-OCT-2000.
XX
PF 05-APR-2000; 2000WO-EP002998.
XX
PR 09-APR-1999; 99EP-00870068.
PR 11-JUN-1999; 99US-0138614P.
XX
PA (INNO-) INNOGENETICS NV.
XX
PI De Canck I, Rombout A, Rosseau R;
XX
WPI; 2000-647426/62.
XX
PT Locus-specific, separate amplification of exon 2, exon 3, and/or exon 4
PT of human leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles using defined
PT primer sets, useful for subtyping or typing of HLA Class I alleles.
XX
PS Claim 4; Page 35; 128pp; English.
XX
CC The present invention relates to a method for the locus-specific,
CC separate amplification of exon 2, exon 3, and/or exon 4 of human
CC leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles. The method is useful
CC for subtyping or typing of HLA class I alleles. The present sequence is
CC an amplification primer used in the method
XX
SQ Sequence 21 BP; 1 A; 9 C; 7 G; 3 T; 0 U; 1 Other;

Query Match          0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 6.4e+02;
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 249 TCACCTCGAGAGGCC 265
Db 21 TGHCCCGGAGAGGCC 5

RESULT 473
AAC92275/c
ID AAC92275 standard; DNA; 21 BP.
XX
AC AAC92275;
XX
DT 22-MAR-2001 (first entry)
XX
DE Mouse LKB1 PCR primer SEQ ID NO:7.
XX
KW Mouse; LKB1; gene knockout animal; LKB1 gene disruption; cancer;
KW Peutz-Jeghers syndrome; serine/threonine kinase; STK11; tumour;
KW PCR primer; ss.
XX
OS Mus musculus.
XX
PN WO200072670-A1.
XX
PD 07-DEC-2000.
```



```
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA (MILL-) MILLENNIUM PHARM INC.
XX
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
XX WPI; 2001-226749/23.
XX
XX Nucleic acids comprising single nucleotide polymorphisms, useful in
XX applications such as forensics, paternity testing, medicine, genetic
XX analysis and phenotype correlations to diseases such as diabetes and
XX atherosclerosis.
XX
XX Example; Page 105; 242pp; English.
XX
XX The present invention provides a method of diagnosing a vascular disease
XX in an individual, involving determining the sequence at various
XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX genes. The sequences at a number of polymorphic sites are also provided
XX in the specification. In particular, the method can be used in the
XX diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX useful in forensics, paternity testing, genetic analysis and phenotype
XX correlations to diseases. The present sequence is an example of one of
XX the human gene SNPs shown in the specification
XX
XX Sequence 21 BP; 2 A; 6 C; 6 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.6; DB 1; Length 21;
XX Best Local Similarity 81.0%; Pred. NO. 6.4e+02;
XX Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
Qy 1028 TGGCTGACITTTGGCTGGCC 1048
Db 1 TGGCTGACITTTGATGGCCC 21
XX
RESULT 476
AAF96318
ID AAF96318 standard; DNA; 21 BP.
XX
XX AAF96318;
XX
XX 06-JUN-2001 (first entry)
XX
XX Human gene single nucleotide polymorphism #1079.
XX
XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
XX polymorphism; vascular disease; coronary artery disease; forensics;
XX myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
XX pulmonary embolism; paternity test; ds.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Variation replace(11,T)
XX /*tag= a
XX /standard_name= "single nucleotide polymorphism"
XX
XX W0200118250-A2.
XX
XX 15-MAR-2001.
XX
XX 07-SEP-2000; 2000WO-US024503.
XX
XX 10-SEP-1999; 99US-0153357P.
XX 26-JUL-2000; 2000US-0220947P.
XX 16-AUG-2000; 2000US-0225724P.
XX
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX (MILL-) MILLENNIUM PHARM INC.
XX
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
```

```
XX WPI; 2001-226749/23.
XX
XX Nucleic acids comprising single nucleotide polymorphisms, useful in
XX applications such as forensics, paternity testing, medicine, genetic
XX analysis and phenotype correlations to diseases such as diabetes and
XX atherosclerosis.
XX
XX Example; Page 126; 242pp; English.
XX
XX The present invention provides a method of diagnosing a vascular disease
XX in an individual, involving determining the sequence at various
XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX genes. The sequences at a number of polymorphic sites are also provided
XX in the specification. In particular, the method can be used in the
XX diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX useful in forensics, paternity testing, genetic analysis and phenotype
XX correlations to diseases. The present sequence is an example of one of
XX the human gene SNPs shown in the specification
XX
XX Sequence 21 BP; 5 A; 9 C; 7 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.6; DB 1; Length 21;
XX Best Local Similarity 81.0%; Pred. NO. 6.4e+02;
XX Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
Qy 1379 GGGCGGACCTCTCCACCAAGC 1399
Db 1 GGGCGGAGCCCGACCAAGC 21
XX
RESULT 477
AAF97060/C
ID AAF97060 standard; DNA; 21 BP.
XX
XX AAF97060;
XX
XX 06-JUN-2001 (first entry)
XX
XX Human gene single nucleotide polymorphism #1821.
XX
XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
XX polymorphism; vascular disease; coronary artery disease; forensics;
XX myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
XX pulmonary embolism; paternity test; ds.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Variation replace(11,A)
XX /*tag= a
XX /standard_name= "single nucleotide polymorphism"
XX
XX W0200118250-A2.
XX
XX 15-MAR-2001.
XX
XX 07-SEP-2000; 2000WO-US024503.
XX
XX 10-SEP-1999; 99US-0153357P.
XX 26-JUL-2000; 2000US-0220947P.
XX 16-AUG-2000; 2000US-0225724P.
XX
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX (MILL-) MILLENNIUM PHARM INC.
XX
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
XX WPI; 2001-226749/23.
XX
XX Nucleic acids comprising single nucleotide polymorphisms, useful in
```

PT applications such as forensics, paternity testing, medicine, genetic  
PT analysis and phenotype correlations to diseases such as diabetes and  
PT atherosclerosis.  
XX  
XX Example; Page 169; 242pp; English.  
XX  
XX The present invention provides a method of diagnosing a vascular disease  
CC in an individual, involving determining the sequence at various  
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4  
CC genes. The sequences at a number of polymorphic sites are also provided  
CC in the specification. In particular, the method can be used in the  
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart  
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and  
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also  
CC useful in forensics, paternity testing, genetic analysis and phenotype  
CC correlations to diseases. The present sequence is an example of one of  
CC the human gene SNPs shown in the specification  
XX  
XX Sequence 21 BP; 7 A; 1 C; 7 G; 6 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.6; DB 1; Length 21;  
Best Local Similarity 81.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1683 CTACATCTCCCTGCTACTC 1703  
| | | | | | | | | | | | | | | | | | | | | |  
Dd 21 CCACATCTTCATGATTACTC 1  
RESULT 478  
AAF28957/C  
ID AAF28957 standard; DNA; 21 BP.  
XX  
XX AAF28957;  
AC  
XX  
DT 18-JUN-2002 (first entry)  
XX  
DE Equine GM-CSF gene 5' RACE primer JP730.  
XX  
XX Immunostimulatory; granulocyte-macrophage colony stimulating factor;  
KW horse; reverse transcriptase PCR; colony formation; blood; cytotoxicity;  
KW inflammation; vector; adjuvant; immunogen; vaccination; vaccine; ss;  
KW equine herpes; tetanus; Borrelia burgdorferi; rabies; 5'RACE; primer.  
XX  
OS Equus sp.  
XX  
XX WO200077210-A1.  
XX  
XX 21-DEC-2000.  
XX  
XX 08-JUN-2000; 2000WO-FR001590.  
XX  
XX 10-JUN-1999; 99US-0138843P.  
XX  
XX (MERI-) MERIAL.  
XX  
XX Bublot M, Perez JM, Andreoni CMP;  
XX  
XX WPI; 2001-080689/09.  
XX  
XX Novel DNA encoding equine granulocyte-macrophage colony-stimulating  
PT factor, useful as adjuvant for vaccines and as non-specific  
PT immunostimulant.  
XX  
XX Example 2; Page 13; 34pp; French.  
XX  
XX The invention relates to the isolation of the sequence of the gene  
CC encoding a horse granulocyte-macrophage colony stimulating factor (GM-CSF  
CC ; AAF28953). The gene was isolated from horse lymphocytes by using a 5'  
CC and 3' RACE (rapid amplification of cDNA ends) method followed by a  
CC reverse transcriptase (RT) PCR method. The sequence shown here represents  
CC the 5' RACE primer JP730 used to isolate the 5' end of the equine GM-CSF  
CC gene. GM-CSF induces colony formation in various types of blood cells and

CC particularly induces cytotoxicity of macrophages; stimulates antibody-  
CC dependent cytotoxicity, and causes recruitment of leucocytes to sites of  
CC inflammation. Vectors containing the gene or the protein itself, are  
CC useful as adjuvants in immunogenic or vaccinating compositions for  
CC horses, e.g. for protection against equine herpes, tetanus, Borrelia  
CC burgdorferi, rabies etc. Also as non-specific stimulators of the immune  
CC system. In a specific example, plasmid pJP97, containing the sequence  
CC for equine GM-CSF was used to transform CHO-K1 cells and the  
CC transformants grown for 48 hours. The culture supernatant was then added  
CC to culture medium being used to grow porcine bone marrow cells. After 14  
CC days, the mean number of colonies per culture box was 12-15, compared  
CC with none for cells grown in absence of GM-CSF. Equine GM-CSF allows a  
CC reduction in the amount of immunogenic/vaccinating component required,  
CC and may induce a response in animals that would otherwise be non-  
CC responders  
XX  
XX Sequence 21 BP; 3 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.6; DB 1; Length 21;  
Best Local Similarity 81.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 618 CATTAAAGCTGGACAAACTGGG 638  
| | | | | | | | | | | | | | | | | | | | | |  
Dd 21 CCTGAAGCTGTACAAACAGGG 1  
RESULT 479  
AAH78643  
ID AAH78643 standard; DNA; 21 BP.  
XX  
XX AAH78643;  
AC  
XX  
DT 10-DEC-2001 (first entry)  
XX  
DE PCR primer for mechanically sensitive potassium channel gene fragment.  
XX  
XX Human; mechanically sensitive potassium channel; riluzole; TWICK;  
KW polyunsaturated fatty acid; arachidonic acid; hTRAAX; chromosome 11q13;  
KW neuronal excitation; muscle excitation; cardiac rhythm; anoxia;  
KW hormone secretion; cardiac disease; vascular disease; ischemia;  
KW nervous system disorder; endocrinal disease; muscle disease;  
KW retinal disease; epilepsy; cardiac arrhythmia; neurodegeneration;  
KW PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200168670-A2.  
XX  
XX 20-SEP-2001.  
XX  
XX 14-MAR-2001; 2001WO-FR000758.  
XX  
XX 14-MAR-2000; 2000FR-00003264.  
XX  
XX (CNRS ) CNRS CENT NAT RECH SCI.  
XX  
XX Lazdunski M, Lesage F, Maingret F;  
XX  
XX WPI; 2001-590037/66.  
XX  
XX New mechanically sensitive potassium channel, useful for treating  
PT cardiovascular diseases and in drug screening, is activated by  
PT polyunsaturated fatty acids.  
XX  
XX Disclosure; Page 15; 37pp; French.  
XX  
XX PCR primers AAH78642-43 were used to amplify a gene fragment of the human  
CC mechanically sensitive potassium channel gene. The channel is activated  
CC by polyunsaturated fatty acids (particularly arachidonic acid (AA)) and  
CC by riluzole. the polypeptide is designated human TWICK-related AA-  
CC activated potassium channel (hTRAAX). The hTRAAX gene is located on  
CC chromosome 11q13. hTRAAX is involved in regulation of neuronal and muscle

CC excitation, cardiac rhythm and secretion of hormones. Cells that express  
CC hTRAAC, designated to screen for modulators of hTRAAC activity. Such  
CC modulators are potentially useful for prevention or treatment, in humans  
CC and animals, of: cardiac and/or vascular disease; nervous system  
CC disorders associated with ischemia and anoxia; endocrinal diseases  
CC associated with anomalous hormone secretion or muscle diseases; and  
CC retinal diseases. Typical examples are epilepsy, cardiac arrhythmia and  
CC neurodegeneration  
XX  
SQ Sequence 21 BP; 3 A; 7 C; 9 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.6; DB 1; Length 21;  
Best Local Similarity 81.0%; Pred. No. 6.4e-02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1273 GAGACGTGGCCAGGCATCTG 1293  
||| ||||| |||||  
Db 1 GAGGCCCGCCAGGGATCCTG 21  
RESULT 480  
AAH78640  
ID AAH78640 standard; DNA; 21 BP.  
XX AC AAH78640;  
XX  
DT 10-DEC-2001 (first entry)  
XX  
DE PCR primer for mechanically sensitive potassium channel gene fragment.  
XX  
KW Human; mechanically sensitive potassium channel; riluzole; TWICK;  
KW polyunsaturated fatty acid; arachidonic acid; hTRAAC; chromosome 11q13;  
KW neuronal excitation; muscle excitation; cardiac rhythm; anoxia;  
KW hormone secretion; cardiac disease; vascular disease; ischemia;  
KW nervous system disorder; endocrinal disease; muscle disease;  
KW retinal disease; epilepsy; cardiac arrhythmia; neurodegeneration;  
KW PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200168670-A2.  
XX  
XX 20-SEP-2001.  
XX  
XX 14-MAR-2001; 2001WO-FR000758.  
XX  
XX 14-MAR-2000; 2000FR-00003264.  
XX  
XX (CNRS ) CNRS CENT NAT RECH SCI.  
XX  
XX Lazdunski M, Lesage F, Maingret F;  
XX  
XX WPI; 2001-590037/66.  
XX  
XX New mechanically sensitive potassium channel, useful for treating  
XX cardiovascular diseases and in drug screening, is activated by  
XX polyunsaturated fatty acids.  
XX  
XX Disclosure; Page 15; 37pp; French.  
XX  
XX PCR primers AAH78639-40 were used to amplify a gene fragment of the human  
XX mechanically sensitive potassium channel gene. The channel is activated  
XX by polyunsaturated fatty acids (particularly arachidonic acid (AA)) and  
XX by riluzole. The polypeptide is designated human TWICK-related AA-  
XX activated potassium channel (hTRAAC). The hTRAAC gene is located on  
XX chromosome 11q13. hTRAAC is involved in regulation of neuronal and muscle  
XX excitation, cardiac rhythm and secretion of hormones. Cells that express  
XX hTRAAC, designated to screen for modulators of hTRAAC activity. Such  
XX modulators are potentially useful for prevention or treatment, in humans  
XX and animals, of: cardiac and/or vascular disease; nervous system  
XX disorders associated with ischemia and anoxia; endocrinal diseases  
XX associated with anomalous hormone secretion or muscle diseases; and  
XX retinal diseases. Typical examples are epilepsy, cardiac arrhythmia and

CC neurodegeneration  
XX  
SQ Sequence 21 BP; 3 A; 7 C; 9 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.6; DB 1; Length 21;  
Best Local Similarity 81.0%; Pred. No. 6.4e-02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1273 GAGACGTGGCCAGGCATCTG 1293  
||| ||||| |||||  
Db 1 GAGGCCCGCCAGGGATCCTG 21  
RESULT 481  
AAH40014  
ID AAH40014 standard; DNA; 21 BP.  
XX AC AAH40014;  
XX  
DT 14-AUG-2001 (first entry)  
XX  
DE SNP specific lower PCR primer SEQ ID 2810.  
XX  
KW Single nucleotide polymorphism; SNP; single nucleotide primer extension;  
KW SNPE; genotyping; agammaglobulinemia; diabetes insipidus; cancer;  
KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;  
KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;  
KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;  
KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200129262-A2.  
XX  
XX 26-APR-2001.  
XX  
XX 13-OCT-2000; 2000WO-US028436.  
XX  
XX 15-OCT-1999; 99US-0160096P.  
XX  
XX (ORCH-) ORCHID BIOSCIENCES INC.  
XX  
XX Picoult-Newburg L, Pohl M;  
XX  
XX WPI; 2001-290930/30.  
XX  
XX New genotyping oligonucleotide, useful for detecting the presence,  
XX absence or identity of single polynucleotide polymorphism in a nucleic  
XX acid sample.  
XX  
XX Claim 1; Page 64; 83pp; English.  
XX  
XX Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide  
XX primer extension (SNPE) primers, and the sequences of regions flanking  
XX sites of single nucleotide polymorphisms SNPs. The present invention  
XX includes kits for determining the presence or absence of a SNP, using the  
XX oligonucleotides of the invention. The PCR primers are used to amplify a  
XX SNP flanking sequence, the SNPE primer is used as a genotyping primer.  
XX The oligonucleotides are useful for genotyping a nucleic acid sample by  
XX performing a single-nucleotide primer extension reaction. The  
XX oligonucleotides are useful for determining the presence, absence or  
XX identity of a SNP and for genotyping nucleic acid samples, for e.g. to  
XX assess by association analysis the genotype of an individual or group of  
XX individuals, having a pathological phenotypic trait suspected of being  
XX caused by one or more SNPs. Phenotypic traits include diseases e.g.  
XX agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular  
XX dystrophy, familial hypercholesterolaemia, polycystic kidney disease,  
XX osteogenesis imperfecta and acute intermittent porphyria. Phenotypic  
XX traits also include symptoms of or susceptibility to multifactorial  
XX disease of which a component is or may be genetic such as autoimmune  
XX diseases, including, rheumatoid arthritis, multiple sclerosis,  
XX inflammation, cancer, nervous system diseases and infection by pathogenic  
XX microorganism. The method is also useful in forensic investigations and

CC paternity analysis. The present sequence represents a PCR primer specific  
CC for a human SNP containing DNA sequence

XX Sequence 21 BP; 5 A; 3 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;  
Best Local Similarity 81.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 223 GATGACAGTGGTGGTGGTGGC 243  
DB 1 GATGACAGAGGGTGGTGGTGGC 21

RESULT 482  
AAD08585/c  
ID AAD08585 standard; DNA; 21 BP.

XX AAD08585;  
DT 04-SEP-2001 (first entry)

XX Primer PHN33881, to identify proteins that interact with maize NPR1.  
XX Maize; NPR1-interacting protein; disease resistance; sequence shuffling;  
XX transgenic plant; signal transduction pathway; primer; ss.

XX Zea mays.  
XX WO200146423-A2.

XX 28-JUN-2001.  
XX 19-DEC-2000; 2000WO-US034524.

XX 21-DEC-1999; 99US-0171691P.  
XX (PION-) PIONEER HI-BRED INT INC.

XX Crane EH;  
XX WPI; 2001-408649/43.

XX Novel maize NPR1-interacting polynucleotide, useful for engineering  
XX plants with improved disease resistance by increasing sensitivity or  
XX capacity of signal transduction pathway and for sequence shuffling.

XX Example 1; Page 57; 69pp; English.

XX The invention relates to NPR1-interacting proteins and nucleic acids  
XX encoding them. NPR1-interacting DNA is useful for modulating the level of  
XX NPR1-interacting protein in plants such as maize, soybean etc. By  
XX manipulating NPR1-interacting DNA in maize or in other plants, the plant  
XX can be engineered to improve resistance to pathogens by increasing the  
XX sensitivity or capacity of the signal transduction pathway. The plants  
XX containing altered NPR1 expression are useful as universal disease  
XX susceptible plants. NPR1-interacting DNA is further useful for sequence  
XX shuffling. They are also used as probes. The invention also provides  
XX transgenic plants with increased disease resistance. The present sequence  
XX is an internal primer used to identify proteins that interact with NPR1

XX Sequence 21 BP; 7 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;  
Best Local Similarity 81.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 821 AGAAGTCCTCCACCTTGCT 841  
DB 21 AGAAGTCCTCCCTTGCT 1

RESULT 483

ABR01357  
ID ABR01357 standard; RNA; 21 BP.

XX ABR01357;

XX 03-JUL-2002 (first entry)  
XX YMD oligonucleotide #17.

XX Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.  
XX Simian immunodeficiency virus.

XX US6303295-B1.  
XX 16-OCT-2001.

XX 12-JUL-1996; 96US-00679493.  
XX 14-JUL-1995; 95US-0001203P.

XX 01-SEP-1995; 95US-0003112P.  
XX (UYGE-) UNIV GEORGIA RES FOUND INC.

XX Taylor EW, Nadimpalli RG, Ramanathan CS;  
XX WPI; 2002-024734/03.

XX New selenoprotein for use in detecting certain viruses, e.g. human  
XX immunodeficiency virus (HIV) or Ebola, cancer and immune system  
XX disorders.

XX Disclosure; Col 69-70; 140pp; English.

XX The present invention relates to selenoproteins encoded in the genome of  
XX a virus, where the coding sequence of the selenoprotein is genetically  
XX engineered for expression in a nucleic acid construct. The invention also  
XX discloses a method for identifying selenoprotein coding sequences, for  
XX detecting certain viruses (e.g. HIV or Ebola), cancer and immune system  
XX disorders. The present sequence was used to illustrate the invention

XX Sequence 21 BP; 7 A; 5 C; 4 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;  
Best Local Similarity 61.9%; Pred. No. 6.4e+02;  
Matches 13; Conservative 4; Mismatches 4; Indels 0; Gaps 0;

QY 862 CTGACGACGACTGCTGATGAC 882  
DB 1 CUGAUCACAAUACAUGGAUGAC 21

RESULT 484  
ABR01358  
ID ABR01358 standard; RNA; 21 BP.

XX ABR01358;  
XX 03-JUL-2002 (first entry)

XX YMD oligonucleotide #18.  
XX Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.

XX Simian immunodeficiency virus.  
XX US6303295-B1.

XX 16-OCT-2001.  
XX 12-JUL-1996; 96US-00679493.

XX 14-JUL-1995; 95US-0001203P.

```

XX  SQ  Sequence 21 BP; 7 A; 5 C; 4 G; 0 T; 5 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 61.9%; Pred. No. 6.4e+02;
Matches 13; Conservative 4; Mismatches 4; Indels 0; Gaps 0;

QY 862 CTGAAGCAGTACCTGGATGAC 882
    |:| |:| |:| |:| |:| |:| |:| |:| |:|
Db 1 CUGAUCCAUAUACAUGGAUGAC 21

RESULT 486
ABA01355
ID ABA01355 standard; RNA; 21 BP.
XX AC
XX ABA01355;
XX 03-JUL-2002 (first entry)
XX DT
XX YMDD oligonucleotide #15.
XX DE
XX Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
XX KW
XX OS Simian immunodeficiency virus.
XX PN
XX US6303295-B1.
XX PD 16-OCT-2001.
XX PF
XX 12-JUL-1996; 96US-00679493.
XX PR
XX 14-JUL-1995; 95US-0001203P.
XX PR 01-SEP-1995; 95US-0003112P.
XX PA (UYGE-) UNIV GEORGIA RES FOUND INC.
XX Taylor EW, Nadimpalli RG, Ramanathan CS;
XX WPI; 2002-024734/03.
XX DR
XX PT New selenoprotein for use in detecting certain viruses, e.g. human
XX PT immunodeficiency virus (HIV) or Ebola, cancer and immune system
XX PT disorders.
XX PS Disclosure; Col 69-70; 140pp; English.
XX CC The present invention relates to selenoproteins encoded in the genome of
XX CC a virus, where the coding sequence of the selenoprotein is genetically
XX CC engineered for expression in a nucleic acid construct. The invention also
XX CC discloses a method for identifying selenoprotein coding sequences, for
XX CC detecting certain viruses (e.g. HIV or Ebola), cancer and immune system
XX CC disorders. The present sequence was used to illustrate the invention
XX CC
SQ Sequence 21 BP; 7 A; 5 C; 4 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 61.9%; Pred. No. 6.4e+02;
Matches 13; Conservative 4; Mismatches 4; Indels 0; Gaps 0;

QY 862 CTGAAGCAGTACCTGGATGAC 882
    |:| |:| |:| |:| |:| |:| |:| |:| |:|
Db 1 CUGAUCCAUAUACAUGGAUGAC 21

RESULT 487
ABA01365
ID ABA01365 standard; RNA; 21 BP.
XX AC
XX ABA01365;
XX 07-AUG-2003 (revised)
XX DT
XX 03-JUL-2002 (first entry)

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XX DE YMD oligonucleotide #25.
XX KW Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
XX OS Mouse mammary tumor virus.
XX PN US6303295-B1.
XX PD 16-OCT-2001.
XX PF 12-JUL-1996; 96US-00679493.
XX PR 14-JUL-1995; 95US-0001203P.
XX PR 01-SEP-1995; 95US-0003112P.
XX PA (UYGE-) UNIV GEORGIA RES FOUND INC.
XX PI Taylor EW, Nadimpalli RG, Ramanathan CS;
XX DR WPI; 2002-024734/03.
XX PT New selenoprotein for use in detecting certain viruses, e.g. human
XX PT immunodeficiency virus (HIV) or Ebola, cancer and immune system
XX PT disorders.
XX PS Disclosure; Col 69-70; 140pp; English.
XX CC The present invention relates to selenoproteins encoded in the genome of
XX CC a virus, where the coding sequence of the selenoprotein is genetically
XX CC engineered for expression in a nucleic acid construct. The invention also
XX CC discloses a method for identifying selenoprotein coding sequences, for
XX CC detecting certain viruses (e.g. HIV or Ebola), cancer and immune system
XX CC disorders. The present sequence was used to illustrate the invention.
XX CC (Updated on 07-AUG-2003 to correct OS field.)
XX SQ Sequence 21 BP; 5 A; 5 C; 6 G; 0 T; 5 U; 0 Other;

  Query Match          0.8%; Score 14.6; DB 1; Length 21;
  Best Local Similarity 61.9%; Pred. No. 6.4e+02;
  Matches 13; Conservative 4; Mismatches 4; Indels 0; Gaps 0;

QY 862 CTGAAGCAGTACTCGATGAC 882
Db 1 CUGCUACAGACGUGGAUGAC 21

RESULT 488
AAD30438
ID AAD30438 standard; DNA; 21 BP.
XX AC AAD30438;
XX DT 21-MAY-2002 (first entry)
XX DE Human androgen receptor (AR) polyglycine tract encoding DNA.
XX KW Human; AIB1; amplified in breast cancer 1; androgen receptor; AR;
XX KW prostate cancer; polyglycine; ds.
XX OS Homo sapiens.
XX PN WO200210452-A2.
XX PD 07-FEB-2002.
XX PF 27-JUL-2001; 2001WO-US023834.
XX PR 27-JUL-2000; 2000US-0221074P.
XX PA (UYRP ) UNIV ROCHESTER.
XX PI Chang C;
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XX WPI; 2002-206195/26.
XX PT Assessing the risk of acquiring or developing prostate cancer in a human
XX PT subject comprises determining the length of the contiguous CAG, CAA
XX PT and/or GGN repeats in the AIB1 gene and/or androgen receptor gene of the
XX PT subject.
XX PF Example 2; Page 45; 86pp; English.
XX CC The invention relates to a method for assessing the risk of prostate
XX CC cancer in a human subject. The method involves determining the length of
XX CC the contiguous CAG or CAA repeats in both AIB1 (Amplified In Breast
XX CC cancer 1) gene alleles or contiguous CAG, CAA or GGN repeats in the
XX CC androgen receptor gene of the subject. The method is useful for assessing
XX CC a subject's risk for acquiring or developing prostate cancer. The present
XX CC sequence is a DNA encoding human androgen receptor (AR) polyglycine
XX CC tract. This sequence is used in the molecular analysis and assessment of
XX CC the CAG and GGN repeat of AR gene
XX SQ Sequence 21 BP; 0 A; 1 C; 15 G; 5 T; 0 U; 0 Other;

  Query Match          0.8%; Score 14.6; DB 1; Length 21;
  Best Local Similarity 81.0%; Pred. No. 6.4e+02;
  Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 232 GGTGGTGGTGGCGGACGTGAC 252
Db 1 GGTGGTGGTGGCGGCGTGGC 21

RESULT 489
ABK53794/C
ID ABK53794 standard; DNA; 21 BP.
XX AC ABK53794;
XX DT 05-JUN-2002 (first entry)
XX DE DMS:acceptor oxidoreductase, PCR primer #40.
XX KW DMS:acceptor oxidoreductase; dimethyl sulphide; sulphoxide;
XX KW prochiral organic sulphide; sulphoxide enantiomer; primer;
XX KW chiral drug production; optically-active functional drug; ss.
XX OS Rhodovulum sulfidophilum.
XX PN WO200216570-A1.
XX PD 28-FEB-2002.
XX PF 21-AUG-2001; 2001WO-AU001033.
XX PR 21-AUG-2000; 2000AU-00009559.
XX PA (UYQU ) UNIV QUEENSLAND.
XX PI Mcdevitt CA, Mcewan AG;
XX DR WPI; 2002-280922/32.
XX PT New recombinant dimethyl sulfide:acceptor oxidoreductase or its subunits,
XX PT useful for oxidizing prochiral organic sulfides to form sulfoxide
XX PT enantiomers for chiral drug synthesis.
XX PS Claim 15; Page 46; 66pp; English.
XX CC The invention relates to a recombinant dimethyl sulphide (DMS):acceptor
XX CC oxidoreductase (I) or its subunit selected from recombinant alpha, beta,
XX CC delta and gamma subunits. (I) is useful for oxidising prochiral organic
XX CC sulphides to form sulphoxide enantiomers for chiral drug synthesis. (I)
XX CC is expressed in a transformed bacterium. The enantiomer formed is useful
XX CC for producing a chiral drug. (I) is useful for synthesis of optically-
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CC active functional groups of drug. DNA encoding (I) is useful for
CC producing a strain of DMS:acceptor oxidoreductase- deficient Rhodovulum
CC sulfidophilum, which is useful in whole-cell reaction, where DMS:acceptor
CC oxidoreductase activity is unwanted. ABK53751-ABK53805 represent R.
CC sulfidophilum DMS:acceptor oxidoreductase subunit coding sequences and
CC PCR primers of the invention
XX
SQ Sequence 21 BP; 3 A; 11 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 346 AACATGGGGTCTGATGGGAG 366
DB 21 ATGATGGGACGGATGGCGAG 1
RESULT 490
ABQ74754/c
ID ABQ74754 standard; DNA; 21 BP.
XX AC ABQ74754;
XX DT 24-OCT-2002 (first entry)
XX DE Human TNFR2 forward PCR primer SEQ ID NO:4.
XX KW Tumour necrosis factor receptor 2; TNFR2; antisense oligonucleotide;
XX KR PCR primer; ss.
XX OS Homo sapiens.
XX PN US6410324-B1.
XX PD 25-JUN-2002.
XX PF 27-APR-2001; 2001US-00844634.
XX PR 27-APR-2001; 2001US-00844634.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Bennett CF, Watt AT;
XX PS WPI; 2002-606814/65.
XX PT New compounds antisense to nucleic acid encoding human or mouse tumor
XX necrosis factor receptor 2 are useful to treat disease associated with
XX mouse tumor necrosis factor receptor 2 expression.
XX Example 13; Col 44; 69pp; English.
XX The present invention describes compounds of 8-30 nucleobases antisense
XX to a nucleic acid encoding human or mouse tumour necrosis factor receptor
XX 2 (TNFR2). Also described is a method for inhibiting expression of human
XX or mouse TNFR2 comprising contacting cells or tissues in vitro with one
XX of the claimed compounds. The antisense compounds are used to treat a
XX disease or condition associated with expression of TNFR2. The present
XX sequence represents a PCR primer for human TNFR2, which is used in an
XX example from the present invention
XX Sequence 21 BP; 4 A; 11 C; 0 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 338 AGGACTTGAGATGGGGTCTG 358
DB 21 AGGAATTGAAGTGGGGAGTG 1
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RESULT 491
ADB92791/c
ID ADB92791 standard; DNA; 21 BP.
XX AC ADB92791;
XX DT 04-DEC-2003 (first entry)
XX DE Human OCT1 consensus binding site EMSA probe top strand, OCT1 F.
XX KW Inflammatory bowel disease; Crohn's disease; ulcerative colitis; TNF;
XX tumour necrosis factor; polymorphism; haplotype; diagnosis; Caucasian;
XX antiinflammatory; gene therapy; TNF antagonist; OCT1; EMSA;
XX electrophoretic mobility shift assay; probe; ss.
XX OS Synthetic.
XX PN WO2003031651-A2.
XX PD 17-APR-2003.
XX PF 09-OCT-2002; 2002WO-GB004582.
XX PR 10-OCT-2001; 2001GB-00024315.
XX PA (OXAG-) OXAGEN LTD.
XX PI Van Heel D, Lench N;
XX PS WPI; 2003-393451/37.
XX PT Determining the susceptibility of a Caucasian subject to inflammatory
XX bowel disease such as Crohn's disease, comprises screening the genetic
XX material of the subject to determine which allele of the TNF -857C/T
XX polymorphism is present.
XX Example; Page 19; 39pp; English.
XX The invention relates to a method for determining the susceptibility of
XX an individual to inflammatory bowel disease. The method comprises
XX screening the genetic material of the individual to determine which
XX allele of the TNF (tumour necrosis factor) -857C/T polymorphism is
XX present. The invention also relates to a method of determining the
XX susceptibility to, or confirming the diagnosis of, Crohn's disease in a
XX Caucasian individual comprising screening the genetic material of the
XX subject for the presence of the TNF -1031C/-863C/-857C/-308G haplotype.
XX The invention additionally encompasses gene therapy for Crohn's disease
XX in a Caucasian with the -1031C/-863C/-857C/-308G haplotype, comprising
XX the introduction of genetic material comprising the TNF -1031T, -863T, -
XX 857T, and/or -308A alleles. The invention further discloses methods for
XX preventing TNF production for the treatment of inflammatory bowel
XX disease. Inflammatory bowel disease (IBD) is a chronic inflammatory
XX disease of the bowel gastrointestinal tract, and can exist as either
XX ulcerative colitis, or as Crohn's disease. The invention is based on the
XX discovery that the TNF haplotype -1031C/-863C/-857C/-308G haplotype
XX confers susceptibility to Crohn's disease in Caucasians. The TNF -857
XX allele acts independently of the known NOD2 gene polymorphisms
XX (Arg702Trp, Gly908Arg, and Leu1007 Phe) which also confer
XX susceptibility to inflammatory bowel disease, and certain embodiments of
XX the invention involve additional determination of these NOD2
XX polymorphisms. The methods are useful for determining susceptibility of a
XX (Caucasian) subject to inflammatory bowel disease, such as ulcerative
XX colitis or Crohn's disease. The methods are also useful for confirming
XX the diagnosis of a Caucasian subject as having Crohn's disease, or for
XX determining the response of a patient to treatment. The agents and the
XX genetic material, comprising TNF -1031T, -863T, -857T and/or -308A
XX alleles, or TNF -1031T/-863T/-857T/-308A haplotype, are useful in
XX manufacturing a medicament for preventing or treating Crohn's disease in
XX a Caucasian subject. Sequences ADB92791-ADB92792 represent the top and
XX bottom strands of a consensus OCT1 binding site EMSA (electrophoretic
XX mobility shift assay) probe used in the example of the invention. OCT1 is
XX a transcription factor for TNF.
```

SQ Sequence 21 BP; 7 A; 5 C; 4 G; 5 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.6; DB 1; Length 21;  
Best Local Similarity 81.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1506 CATATTTCACATAAGAGAT 1526  
| | | | | | | | | | | | | | | | | | | | |  
Db 21 CCTATTTCATTAAGGGAGCT 1

RESULT 492  
ADB79190/C  
ID ADB79190 standard; DNA; 21 BP.  
XX AC ADB79190;  
XX DT 04-DEC-2003 (first entry)  
XX DE Nucleic acid encoding caspase-2 protease cleavage signal.  
XX KW Protease; immunomodulator; antigen; antigen-presenting cell; reporter;  
XX ds.  
XX OS Unidentified.  
XX PN WO2003065977-A2.  
XX XX WO2003065977-A2.  
XX PD 14-AUG-2003.  
XX XX 20-NOV-2002; 2002WO-US037123.  
XX PR 20-NOV-2001; 2001US-0331928P.  
XX PA (DAND ) DANA FARBER CANCER INST.  
XX PI Hirano N, Butler M, Nadler LM;  
XX WPI; 2003-636934/60.  
XX New vertebrate cell comprising a nucleic acid encoding an exogenous  
PT antigen-presenting molecule or encoding a fusion polypeptide comprising  
PT an antigen, useful for preparing a composition for modulating an immune  
PT response.  
PS Disclosure; Page 36; 91pp; English.  
XX The invention relates to a new vertebrate cell. This cell comprises a  
XX nucleic acid encoding an exogenous antigen-presenting molecule or a  
XX fusion polypeptide. The polypeptide consists of an antigen fused in frame  
XX at its N-terminus to a heterologous reporter polypeptide, where the  
XX antigen is presented at the cell surface by the exogenous antigen-  
XX presenting molecule, where the vertebrate cell functions as a  
XX professional antigen presenting cell. The vertebrate cell further  
XX comprises a nucleic acid encoding an exogenous immunoregulatory molecule.  
XX It is a human immortalised cell. It comprises a dendritic cell, a  
XX macrophage, a B cell, a mast cell, a parenchymal cell, a Kupffer cell or  
XX a fibroblast cell. The antigen is fused to the heterologous reporter  
XX polypeptide through a linker polypeptide. It is located at the C terminus  
XX of the fusion polypeptide. The linker is cleavable by a cell-associated  
XX protease, which is an endogenous protease or an exogenous protease  
XX expressed by the nucleic acid encoding the protease. The antigen  
XX encoded by the nucleic acid encoding an antigen fused in frame at its N  
XX terminus to a heterologous reporter polypeptide is 8 to 10 amino acids in  
XX length. The nucleic acid encoding an exogenous antigen-presenting  
XX molecule encodes a class I molecule, which is an HLA or H-2 molecule. The  
XX heterologous reporter polypeptide comprises a Green Fluorescent Protein.  
XX It comprises a portion of a cell surface protein that is expressed on the  
XX surface of a cell. It comprises a polypeptide which permits the cell to  
XX survive in selective medium. The cell surface protein that is expressed  
XX on the surface of a cell permits the selection of cells expressing the  
XX reporter polypeptide by binding to an antibody specific for the cell  
XX surface protein. The immunoregulatory molecule comprises a costimulatory

CC molecule, an accessory molecule, a cytokine, a chemokine and/or an  
CC adhesion molecule. The costimulatory molecule is CD80 or CD83. The  
CC antigen is a tumour-specific antigen. The vertebrate cell comprising a  
CC nucleic acid encoding an exogenous antigen-presenting molecule or  
CC encoding a fusion polypeptide comprising an antigen, is useful for  
CC preparing a composition for modulating an immune response. The current  
CC sequence represents a nucleic acid sequence encoding a caspase-2 protease  
CC cleavage signal. Such a protease is useful to the invention for cleaving  
CC the antigenic peptide from the heterologous polypeptide at the linker  
CC sequence.  
XX SQ Sequence 21 BP; 2 A; 5 C; 11 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.6; DB 1; Length 21;  
Best Local Similarity 81.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 372 CCAGGCTTCAGCCACGTCCTC 392  
| | | | | | | | | | | | | | | | | | | | |  
Db 21 CCAGCCGTCGCCACGTCAC 1

RESULT 493  
ADC64462  
ID ADC64462 standard; DNA; 21 BP.  
XX AC ADC64462;  
XX DT 18-DEC-2003 (first entry)  
XX DE Rat ERK-3 designed oligonucleotide probe, E13, #2.  
XX KW Rat; ss; antibody; extracellular signal regulated kinase-5; hERK-5; ERK;  
XX mitogen activated protein kinase; MAP kinase; hybridoma;  
XX diabetes mellitus; Alzheimer's disease; peripheral neuropathy;  
XX gene therapy; antidiabetic; neuroprotective; ERK-3; probe.  
XX OS Synthetic.  
XX OS Rattus sp.  
XX PN US6579972-B1.  
XX PD 17-JUN-2003.  
XX PF 09-SEP-1999; 99US-00393212.  
XX PR 19-MAR-1993; 93US-00029404.  
XX PR 02-JUN-1995; 95US-00459953.  
XX PA (PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.  
XX PI Lechner C, Moller NP, Ullrich A;  
XX WPI; 2003-634515/60.  
XX New antibody, useful for preparing a composition for treating  
PT extracellular signal regulated kinase - 5-associated diseases in a mammal  
PT e.g., diabetes mellitus, Alzheimer's disease or peripheral neuropathies.  
XX Example 1; Col 38; 40pp; English.  
XX The invention discloses a new antibody comprising a specific binding  
XX affinity to the human extracellular signal regulated kinase (hERK)-5  
XX protein. ERKs are also referred to as mitogen activated protein (MAP)  
XX kinases. The hybridoma that produces the monoclonal antibody is also  
XX claimed. The antibody is useful for preparing a composition for treating  
XX hERK-5-associated diseases e.g. diabetes mellitus, Alzheimer's disease or  
XX peripheral neuropathies in a mammal. The polynucleotide encoding the  
XX protein is also useful for treating these diseases using gene therapy  
XX techniques. The sequence presented is an oligonucleotide probe, version  
XX #2, which corresponds to a region of the rat ERK-3 coding sequence, and  
XX was used designed as a 32 fold degenerate sequence from ERK1, ERK2 and  
XX ERK3 to detect the human ERK-5 cDNA clone.

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XX SQ Sequence 21 BP; 3 A; 4 C; 5 G; 5 T; 0 U; 4 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 66.7%; Pred. No. 6.4e+02;
Matches 14; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

Qy 1156 ATGTGGGTGTGGCTGCATC 1176
Db 1 AYATKGGKCTRGCTGCATC 21

RESULT 494
ADD35311/C
XX ID ADD35311 standard; DNA; 21 BP.
XX AC ADD35311;
XX DT 15-JAN-2004 (first entry)
XX DE Human KIAA0172 associated primer #12.
XX KW human; KIAA0172; cancer; ss; PCR; primer.
XX OS Homo sapiens.
XX PN JP2002369696-A.
XX PD 24-DEC-2002.
XX PF 01-APR-2002; 2002JP-00099422.
XX PR 30-MAR-2001; 2001JP-00101401.
XX PA (DOKU-) DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO.
XX PA (INFO-) INFO GENES CO LTD.
XX PA (KAZU-) ZH KAZUSA DNA KENKYUSHO.
XX DR WPI; 2003-495749/47.
XX DE Human KIAA0172 gene encoding a sequence of 1194 amino acids, useful for
PT diagnosis and treatment of cancer and for development of effective growth
PT inhibitors of cancer cells.
XX Example 3; SEQ ID NO 47; 40pp; Japanese.
XX CC The invention relates to new human KIAA0172 gene. The KIAA0172 gene and
CC polypeptide are useful for detection and treatment of cancer. The present
CC sequence represents KIAA0172 associated primer.
XX SQ Sequence 21 BP; 10 A; 0 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1679 CCAACTACATCTCCCTGCTT 1699
Db 21 CCAACTACCTTTCTCTCTT 1

RESULT 495
AAQ41809
XX ID AAQ41809 standard; DNA; 22 BP.
XX AC AAQ41809;
XX DT 25-MAR-2003 (revised)
XX DT 03-SEP-1993 (first entry)
XX DE Baculovirus C2 complex binding site #6.
XX KW Myc; c-myc; mammalian; E box; cancer; therapy; C1; C2; C2'; complex;
```

```
KW homo-oligomer; hetero-oligomer; myogenin; Max; oncoprotein; primer;
KW probe; electrophoretic mobility shift assay; EMSA; ss.
XX Synthetic.
XX Key Location/Qualifiers
FH protein_bind 13..18
FT /*tag= a
FT /note= "C2 complex binding site"
XX WO9308701-A1.
XX 13-MAY-1993.
XX 09-OCT-1992; 92WO-US008603.
XX 30-OCT-1991; 91US-00785567.
XX (SEHO ) GEN HOSPITAL CORP.
XX Kingston RE, Papoulas O;
XX WPI; 1993-167291/20.
XX Prodn. of c-Myc protein from mammalian cells - and detection of c Myc
XX inhibitors for use in cancer therapy.
XX Disclosure; Fig 7a; 10pp; English.
XX The sequences given in AAQ41767-825 represent sequences which are bound
XX in an electrophoretic mobility shift assay (EMSA) by Myc. The isolated
XX sequences contain the central E box core of CAGGTG which binds very
XX weakly with Myc homo-oligomers (C1 complex), but more tightly with Myc
XX hetero-oligomers (C2 complex). The C2 complex requires a 26-29 kD factor
XX in addition to Myc. The additional factor copurifies with Myc and
XX resembles Max protein. A second copurifying 40-50 kD factor has been
XX identified (forming C2' complex). Sites selected by the C2' complex
XX contain the core CAGGTG which bears remarkable homology to a myogenin
XX binding site (see AAQ41763). Oligonucleotides containing the E box can be
XX used in the purification of Myc from a mammalian source. See also
XX AAQ41761-861. The isolated target sequences may be used in a method to
XX inhibit c-Myc oncoprotein activity. (Updated on 25-MAR-2003 to correct PN
XX field.)
XX SQ Sequence 22 BP; 6 A; 9 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 6.7e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1263 CCCAACTGAGGAGACGCTGCC 1283
Db 1 CCCAACTAGACCACTGGGCC 21

RESULT 496
AAZ44872
XX ID AAZ44872 standard; DNA; 22 BP.
XX AC AAZ44872;
XX DT 27-APR-2000 (first entry)
XX DE Human apolipoprotein E PCR primer P1.
XX KW Detection; primer extension; point mutation; pathogenicity; therapy;
XX cancer; genetic disease; polymorphism; apolipoprotein E; ApoE; human;
XX PCR primer; ss.
XX OS Homo sapiens.
XX PN US6013431-A.
XX KW
```

(WHD) WHITEHEAD INST BIOMEDICAL RES.  
(AFFY-) AFFYMETRIX INC.

PA  
XX  
XX  
PI PI Altschuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;  
DR DR Lipshutz RJ, Patil N, Sklar P;  
XX WPI; 2000-611722/58.

PT Nucleic acid selected from one of 106 genes comprising single nucleotide  
XX polymorphisms, allele-specific oligonucleotides to the genes are useful  
PT for phenotypic correlations, forensics, paternity testing, medicine and  
PT genetic analysis.

XX  
XX Claim 6; Fig 5; 214pp; English.

XX The present invention is concerned with a number of human single  
CC nucleotide polymorphisms (SNPs) which the inventors identified in human  
CC genes. These SNPs can be used in disease diagnosis and prediction of an  
CC individual's susceptibility to disease, in forensic and paternity testing  
CC and in genetic mapping. In particular, the SNPs of the invention can be  
CC used to diagnose susceptibility to diseases of the cardiovascular,  
CC endocrine and neurological systems, such as coronary artery disease,  
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's  
XX diseases

XX Sequence 22 BP; 9 A; 3 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.88; Score 14.6; DB 1; Length 22;  
Best Local Similarity 81.08; Pred. No. 6.7e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1497 CACTACTTCCTATTTGCACT 1517  
||| ||| ||| ||| ||| ||| |||  
Db 21 CATTAATTACGTATTTGCACT 1

RESULT 498  
AAC80114/C  
ID ID AAC80114 standard; DNA; 22 BP.  
XX AC AAC80114;  
XX 03-MAY-2001 (first entry)  
DT XX  
DE Reverse primer #26 used for amplification of HLA-A exon 2.  
XX HLA-A; HLA-B; HLA-C; typing; primer; human; ss.  
XX Homo sapiens.  
OS Synthetic.  
XX WO200061795-A2.  
PN 19-OCT-2000.  
PD  
XX 05-APR-2000; 2000WO-EP002998.  
PF  
XX 09-APR-1999; 99EP-00870068.  
PR 11-JUN-1999; 99US-0138614P.  
XX  
XX (INNO-) INNOGENETICS NV.  
PA  
XX De Canck I, Rombout A, Rossau R;  
PI WPI; 2000-647426/62.  
DR  
XX Locus-specific, separate amplification of exon 2, exon 3, and/or exon 4  
PT of human leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles using defined  
PT primer sets, useful for subtyping or typing of HLA Class I alleles.  
XX  
XX Claim 4; Page 35; 128pp; English.

The present invention relates to a method for the locus-specific,

CC separate amplification of exon 2, exon 3, and/or exon 4 of human  
CC leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles. The method is useful  
CC for subtyping or typing of HLA class I alleles. The present sequence is  
CC an amplification primer used in the method

XX Sequence 22 BP; 1 A; 10 C; 7 G; 3 T; 0 U; 1 Other;

SQ Query Match 0.8%; Score 14.6; DB 1; Length 22;  
Best Local Similarity 88.2%; Pred. No. 6.7e+02;  
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 249 TGACCTGGAGAGGCC 265

Db 22 TGCCCCGGAGAGGCC 6

RESULT 499

AAS23687/C

ID AAS23687 standard; DNA; 22 BP.

XX AAS23687;

AC AAS23687;

XX 04-DEC-2001 (first entry)

DT Primer A #1 used as probe for identifying C. albicans GRACE strain.

XX Gene identification; essential gene; GRAC3; pathogenic fungus;

XX gene replacement and conditional expression; fungal infection; probe; ss.

XX Candida albicans.

XX Synthetic.

XX WO200160975-A2.

XX 23-AUG-2001.

XX 20-FEB-2001; 2001WO-US005551.

XX 18-FEB-2000; 2000US-0183534P.

XX (ELIT-) ELITRA PHARM INC.

XX Roemer T, Jiang B, Boone C, Bussey H;

XX WPI; 2001-489080/53.

XX Identifying genes essential to fungal metabolisms and identifying

PT potential therapeutic agents that target these genes.

XX Disclosure; Page 301; 324pp; English.

XX The present invention relates to novel methods for constructing fungal  
CC strains useful for identification and validation of gene products as  
CC targets for therapeutic agents, for creating a collection of identified  
CC essential genes, and screening assays for the discovery of new drugs. The  
CC invention provides the GRACE (gene replacement and conditional  
CC expression) method for the construction of mutant organisms referred to  
CC as GRACE strains of the organism. The invention can be applied to any  
CC organism, particularly a pathogenic fungus e.g. Candida albicans,  
CC Aspergillus fumigatus and Cryptococcus neoformans. The methods are useful  
CC to identify agents that may be used in the treatment of fungal  
CC infections. AAS23687-AAS23747 represent primers A #1-61 used as probes  
CC for identifying C. albicans GRACE strains

XX Sequence 22 BP; 3 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

SQ Query Match 0.8%; Score 14.6; DB 1; Length 22;  
Best Local Similarity 81.0%; Pred. No. 6.7e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 130 CGGATCAGACAGATCAACGG 150

Db 22 CGAATCAAGATGATCAACAG 2

RESULT 500

ABS61060

ID ABS61060 standard; DNA; 22 BP.

XX ABS61060;

XX 05-NOV-2002 (first entry)

DT Human automated genomic bit analysis (GBA) PCR primer #37.

DE Human; ss; aminopeptidase P; XPNEP2; bradykinin receptor B1; primer;

XX BDKRB1; tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH;

XX kallikrein 1; KLK1; bradykinin receptor B2; BDKRB2; gene therapy;

XX angiotensin converting enzyme 2; ACE2; protease inhibitor 4; P14;

XX poliovirus; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;

XX cardiovascular disease; angina pectoris; hypertension; heart failure;

XX myocardial infarction; ventricular hypertrophy; vascular disease;

XX aneurysm; embolism; thrombosis; coronary artery disease; angiodema;

XX arteriosclerosis; atherosclerosis; hypersensitivity; sepsis; PCR;

XX autoimmune disease; inflammatory arthritis; cancer; wound; genotyping;

XX viral infection; bacterial infection; fungal infection; COPD; GBA;

XX chronic obstructive pulmonary disease; enterocolitis;

XX automated genetic bit analysis.

XX Homo sapiens.

OS WO200261131-A2.

XX 08-AUG-2002.

XX 03-DEC-2001; 2001WO-US047235.

XX 04-DEC-2000; 2000US-0251015P.

XX 23-JAN-2001; 2001US-0263678P.

XX 02-MAR-2001; 2001US-0273037P.

XX (BRIM) BRISTOL-MYERS SQUIBB CO.

XX (TSUC)/ TSUCHIHASHI Z.

XX (HUIL/) HUI L.

XX Tsuchihashi Z, Hui L, Zerba KE, Ma-Edmonds M, Perrone MH;

XX Swanson BN, Powell JR;

XX WPI; 2002-619265/66.

XX New isolated nucleic acid with at least one polymorphic position, useful  
PT for detecting, diagnosing and treating disorders such as angioedema,  
PT cancer, viral, bacterial or fungal infection, cardiovascular and  
PT autoimmune diseases.

XX Example 3; Page 926; 977pp; English.

XX The invention relates to an isolated nucleic acid from a human gene  
CC encoding aminopeptidase P (XPNEP2), bradykinin receptor B1 (BDKRB1),  
CC tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein  
CC 1 (KLK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme  
CC 2 (ACE2) or protease inhibitor 4 (P14), comprising at least one  
CC polymorphic position. Also included are (1) a probe that hybridises to a  
CC polymorphic position as provided in the detailed summary of single  
CC nucleotide polymorphisms comprising additional 5' and 3' flanking genomic  
CC sequence; (2) analysing (M1) at least one nucleic acid sample comprising  
CC obtaining the sample from one or more individuals and determining the  
CC nucleic acid sequence at one or more polymorphic positions in a gene  
CC encoding a protein selected from the group above; (3) constructing (M2)  
CC haplotypes using the genes comprising grouping at least two nucleic acids  
CC; (4) identifying (M3) an individual at risk of developing a disorder  
CC upon administration of an ACE inhibitor and/or vasopeptidase inhibitor  
CC using the polymorphic data; (5) a library of nucleic acids, each of which  
CC comprises one or more polymorphic positions within a gene encoding a  
CC human protein selected from the group above; and (6) genotyping (M4) an  
CC individual comprising obtaining a nucleic acid sample, determining the

xx The invention relates to constructing (M1) a strain of diploid fungal  
cc cells in which both alleles of a gene are modified, comprising modifying  
cc one allele by insertion or replacement by a cassette having an  
cc expressible selectable marker and modifying other allele by  
cc recombination of a promoter replacement fragment with a heterologous

PI Gerlach V, Macdougall JK, Millet I, Gunther E, Bierman K;  
PI Grosse WM, Alsobrook JP, Lepley DM, Burgess CE, Vernat CAM;  
PI Shenoy S, Spytke KA, Mishrav, Padigaru M;

xx The invention relates to constructing (M1) a strain of diploid fungal  
cc cells in which both alleles of a gene are modified, comprising modifying  
cc one allele by insertion or replacement by a cassette having an  
cc expressible selectable marker and modifying other allele by  
cc recombination of a promoter replacement fragment with a heterologous

DR WPI; 2002-479708/51.  
XX  
XX New NOVX or NOV1 polypeptides and nucleic acids, useful for preventing or  
PT treating NOVX-associated disorders e.g. cardiomyopathy, atherosclerosis,  
PT cancer, Huntington's disease or Alzheimer's disease.  
XX  
XX Example 2; Page 96; 124pp; English.  
XX  
XX The present invention describes human NOV1 (an endozepine-related protein  
CC precursor-like protein). Human NOV1 maps to human chromosome 10. NOV1 has  
CC cytosolic, antiarteriosclerotic, antidiabetic, haemostatic, anti-HIV,  
CC antiasthmatic, anti-inflammatory, hypotensive, neuroprotective,  
CC anorectic, nootropic, antidepressant, immunosuppressive, tranquilizer,  
CC analgesic, cardiant, gastrointestinal, anticonvulsant, immunomodulator,  
CC antialcoholic and antilipaeamic activities, and can be used in gene  
CC therapy. NOVX nucleic acids, polypeptides and antibodies are useful for  
CC treating or diagnosing diseases such as cancers, Von Hippel-Lindau  
CC syndrome, Alzheimer's disease, stroke, tuberous sclerosis, Parkinson's  
CC disease, hypercalcaemia, Huntington's disease, cerebral palsy, epilepsy,  
CC Lesch-Nyhan syndrome, multiple sclerosis, ataxia-telangiectasia, pain,  
CC leukodystrophies, behavioural disorders, addiction, anxiety, depression,  
CC neurodegenerative disorders, stress, immune disorders, alcoholism  
CC obesity, diabetes, haematopoietic disorders, dyslipidaemias, and wasting  
CC disorders associated with chronic diseases. The nucleic acids and  
CC polypeptides may also be used as targets for the identification of small  
CC molecules that modulate or inhibit e.g. neurogenesis, cell proliferation,  
CC cell differentiation, haematopoiesis, wound healing and angiogenesis. The  
CC present sequence represents a PCR primer for human NOV1, which is used in  
CC an example from the present invention  
XX  
XX Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 14.6; DB 1; Length 22;  
Best Local Similarity 81.0%; Pred. No. 6.7e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 886 GGGAACATCATCAACATGCAC 906  
DB 2 GGGAATCATCAACATCAAC 22  
|||||

RESULT 503  
ABQ81301/c  
ID ABQ81301 standard; DNA; 22 BP.  
XX  
XX AC ABQ81301;  
XX  
XX 12-DEC-2002 (first entry)  
XX Cytochrome P450 CYP27A1 antisense primer.  
XX  
XX Cytochrome P450; CYP27A1; enzyme; tachyphylaxis; drug tolerance; human;  
XX psoriasis; antipsoriatic; antipruritic; dermatological; PCR; primer; ss.  
XX Homo sapiens.  
XX WO200245704-A2.  
XX  
XX 13-JUN-2002.  
XX  
XX 04-DEC-2001; 2001WO-GB005369.  
XX  
XX 04-DEC-2000; 2000GB-00029524.  
XX  
XX (MOLE-) MOLECULAR SKINCARE LTD.  
XX  
XX Adcocks C, Bavik C, Corx M, Duff G, Tazi-Ahmini R, Ward S;  
XX  
XX WPI; 2002-7123234/77.  
XX  
XX Alleviating or preventing a tachyphylactic response to an agent and  
PT treating psoriasis, comprises administering an antagonist of a metabolic  
PT enzyme, which is induced as a result of exposure to the agent, to a

PT patient.  
XX  
XX Example 1; Page 75; 136pp; English.  
XX  
XX The present sequence is an antisense primer for cytochrome P450 CYP27A1.  
CC RT-PCR was used to characterise metabolic enzyme induction by vitamin D  
CC analogues, corticosteroids and macrolactams in human skin. The invention  
CC provides for the use of antagonists of P450 enzymes for the prevention or  
CC alleviation of a tachyphylactic response to administration of a vitamin D  
CC analogue, corticosteroid or macrolactam to a patient, e.g. for the  
CC treatment of psoriasis. The underlying cause of tachyphylaxis was shown  
CC to be degradation of a drug in the patient, rather than desensitization  
CC or receptor down-regulation. Exposure of a patient to the drug for  
CC extended periods results in an increase in the expression of enzymes  
CC which are capable of metabolizing the drug. A method for treatment of  
CC tachyphylaxis therefore involves inhibiting the induced metabolic enzyme,  
CC especially a P450 cytochrome, by administration of an antagonist of the  
CC enzyme. Detection of an increase in the amount and/or activity of a  
CC metabolic enzyme capable of metabolizing a drug following extended  
CC exposure of a cell from an individual to the drug indicates the increased  
CC likelihood of that individual developing a tachyphylactic response to the  
CC drug  
XX  
XX Sequence 22 BP; 5 A; 9 C; 3 G; 5 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 14.6; DB 1; Length 22;  
Best Local Similarity 81.0%; Pred. No. 6.7e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 864 GAAGCAGTACTCGATGACTG 884  
DB 21 GAAGCGATACCTGGATGTTG 1  
|||||

RESULT 504  
AAL43364  
ID AAL43364 standard; DNA; 22 BP.  
XX  
XX AC AAL43364;  
XX  
XX 22-AUG-2002 (first entry)  
XX Bacillus sp novel acid protease PCR primer D165-S.  
XX Acid protease; PCR; primer; ss; digestive enzyme; protein hydrolysis;  
XX drug production; food production; enzyme.  
XX Bacillus sp.  
XX JP2002078489-A.  
XX  
XX 19-MAR-2002.  
XX  
XX 04-SEP-2000; 2000JP-00267840.  
XX  
XX 04-SEP-2000; 2000JP-00267840.  
XX (DAIW ) DAIWA KASEI KK.  
XX WPI; 2002-430301/46.  
XX  
XX A new acid protease in which the serine residue participates to activity  
PT expression.  
XX  
XX Example 4; Page 8; 25pp; Japanese.  
XX  
XX The invention comprises the amino acid and coding sequences of two novel  
CC Bacillus sp acid proteases. The novel acid proteases of the invention are  
CC useful as digestive enzymes for the hydrolysis of proteins in drugs and  
CC foods. The present DNA sequence represents a PCR primer that is specific  
CC for the gene sequence of a Bacillus sp acid protease  
XX  
XX Sequence 22 BP; 5 A; 7 C; 8 G; 2 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 14.6; DB 1; Length 22;  
 Best Local Similarity 81.0%; Pred. No. 6.7e+02;  
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1468 CTGGGGAGCGGATCCACAA 1488  
 DB 1 CGGGCCGCGGATCCACAG 21

RESULT 505  
 AAL43365/C  
 ID AAL43365 standard; DNA; 22 BP.  
 XX  
 AC AAL43365;  
 DT 22-AUG-2002 (first entry)  
 DE Bacillus sp novel acid protease PCR primer D165-ASS.  
 KW Acid protease; PCR; primer; ss; digestive enzyme; protein hydrolysis;  
 KW drug production; food production; enzyme.  
 XX  
 OS Bacillus sp.  
 XX  
 PN JP2002078489-A.  
 PD 19-MAR-2002.  
 XX  
 PF 04-SEP-2000; 2000JP-00267840.  
 XX  
 PR 04-SEP-2000; 2000JP-00267840.  
 XX  
 PA (DAIW) DAIWA KASEI KK.  
 DR WPI; 2002-430301/46.  
 XX  
 PT A new acid protease in which the serine residue participates to activity  
 PT expression.  
 XX  
 PS Example 4; Page 8; 25pp; Japanese.  
 CC The invention comprises the amino acid and coding sequences of two novel  
 CC Bacillus sp acid proteases. The novel acid proteases of the invention are  
 CC useful as digestive enzymes for the hydrolysis of proteins in drugs and  
 CC foods. The present DNA sequence represents a PCR primer that is specific  
 CC for the gene sequence of a Bacillus sp acid protease  
 XX  
 SQ Sequence 22 BP; 1 A; 9 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;  
 Best Local Similarity 81.0%; Pred. No. 6.7e+02;  
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1466 GTCTGGGGAGCGGATCCACA 1486  
 DB 22 GCGGGGCGCGGATCCACA 2

RESULT 506  
 AAL43783  
 ID AAL43783 standard; DNA; 22 BP.  
 XX  
 AC AAL43783;  
 DT 26-SEP-2002 (first entry)  
 DE Human NOV2 gene PCR primer: SEQ ID NO 39.  
 KW Human; PCR; primer; ss; gene therapy; vaccine; NOV2; NOVX; cancer;  
 KW neurodegenerative disorder; immune disorder; haematopoietic disorder;  
 KW dyslipidaemia; obesity; metabolic syndrome X; wasting disorder; pain;  
 KW Von Hippel-Lindau syndrome; Alzheimer's disease; stroke; cerebral palsy;

KW tuberos sclerosis; hypercalcaemia; Parkinson's disease; epilepsy;  
 KW Huntington's disease; Lesch-Nyhan syndrome; ataxia-telangiectasia;  
 KW depression; stress; diabetes.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200244211-A2.  
 XX  
 PD 06-JUN-2002.  
 XX  
 PF 29-NOV-2001; 2001WO-US048842.  
 XX  
 PR 29-NOV-2000; 2000US-0253834P.  
 PR 25-JAN-2001; 2001US-0264180P.  
 PR 20-AUG-2001; 2001US-0313656P.  
 XX  
 PA (CURA-) CURAGEN CORP.  
 XX  
 PI Edinger SR, Macdougall JR, Millet I, Ellerman K, Stone DJ;  
 PI Gerlach VL, Grosse WM, Alsobrook JP, Lepley DM, Reiger DK;  
 PI Burgess CE, Casman SJ, Spytek KA, Boldog FL, Li L, Padigaru M;  
 PI Mishra V, Patturajan M, Shenoy SK, Rastelli L, Tchernev VT;  
 PI Vernet CAM, Zerhusen BD, Malyankar UM, Guo X, Miller CE;  
 PI Gangolli EA;  
 XX  
 DR WPI; 2002-527702/56.  
 XX  
 PT Novel cytoplasmic, nuclear, membrane bound and secreted NOVX  
 PT polypeptides, useful for treating cancers, neurodegenerative disorders,  
 PT immune disorders, hematopoietic disorders, diabetes and metabolic  
 PT disorders.  
 XX  
 PS Example 3; Page 130; 155pp; English.  
 CC The invention comprises the amino acid and coding sequences of human  
 CC NOVX (NOV1 and NOV2) proteins. The NOVX proteins of the invention are  
 CC useful for identifying an agent (a cellular receptor or downstream  
 CC effector) that binds to a NOVX protein. The NOVX DNA and protein  
 CC sequences of the invention are useful for the treatment (gene therapy) or  
 CC prevention (vaccine) of: cancer; neurodegenerative disorders; immune  
 CC disorders; haematopoietic disorders; dyslipidaemia; obesity; metabolic  
 CC syndrome X; wasting disorders; Von Hippel-Lindau (VHL) syndrome;  
 CC Alzheimer's disease; stroke; tuberos sclerosis; hypercalcaemia;  
 CC Parkinson's disease; Huntington's disease; cerebral palsy; epilepsy;  
 CC Lesch-Nyhan syndrome; ataxia-telangiectasia; pain; depression; stress and  
 CC diabetes. The present DNA sequence represents a NOV2 gene PCR primer  
 XX  
 SQ Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;  
 Best Local Similarity 81.0%; Pred. No. 6.7e+02;  
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 886 GGGACATCATCAACATGCAC 906  
 DB 2 GCGAATCATCAACATCAAC 22

RESULT 507  
 AAL43762  
 ID AAL43762 standard; DNA; 22 BP.  
 XX  
 AC AAL43762;  
 DT 26-SEP-2002 (first entry)  
 XX  
 DE Human NOV1 gene PCR primer: SEQ ID NO 18.  
 KW Human; PCR; primer; ss; gene therapy; vaccine; NOV1; NOVX; cancer;  
 KW neurodegenerative disorder; immune disorder; haematopoietic disorder;  
 KW dyslipidaemia; obesity; metabolic syndrome X; wasting disorder; pain;  
 KW Von Hippel-Lindau syndrome; Alzheimer's disease; stroke; cerebral palsy;  
 KW tuberos sclerosis; hypercalcaemia; Parkinson's disease; epilepsy;



KW Huntington's disease; Lesch-Nyhan syndrome; ataxia-telangiectasia;  
 XX depression; stress; diabetes.  
 OS Homo sapiens.  
 XX WO200244211-A2.  
 XX PD 06-JUN-2002.  
 XX PF 29-NOV-2001; 2001WO-US048842.  
 XX PR 29-NOV-2000; 2000US-0253834P.  
 XX PR 25-JAN-2001; 2001US-0264180P.  
 XX PR 20-AUG-2001; 2001US-0313656P.  
 XX PA (CURA-) CURAGEN CORP.  
 XX PI Edinger SR, Macdougall JR, Millet I, Ellerman K, Stone DJ;  
 XX PI Gerlach VL, Grosse WM, Alsobrook JP, Lepley DM, Reiger DK;  
 XX PI Burgess CE, Casman SJ, Spytek KA, Boldog FL, Li L, Padigaru M;  
 XX PI Mishra V, Patturajan M, Shenoy SK, Rastelli L, Tchernev VT;  
 XX PI Vernet CAM, Zerhusen BD, Malyankar UM, Guo X, Miller CE;  
 XX PI Gangolli EA;  
 XX DR WPI; 2002-527702/56.  
 XX PT Novel cytoplasmic, nuclear, membrane bound and secreted NOVX  
 XX polypeptides, useful for treating cancers, neurodegenerative disorders,  
 XX immune disorders, hematopoietic disorders, diabetes and metabolic  
 XX disorders.  
 XX PS Example 3; Page 110; 155pp; English.  
 XX CC The invention comprises the amino acid and coding sequences of human  
 XX NOVX (NOV1 and NOV2) proteins. The NOVX proteins of the invention are  
 XX useful for identifying an agent (a cellular receptor or downstream  
 XX effector) that binds to a NOVX protein. The NOVX DNA and protein  
 XX sequences of the invention are useful for the treatment (gene therapy) or  
 XX prevention (vaccine) of: cancer; neurodegenerative disorders; immune  
 XX disorders; hematopoietic disorders; dyslipidaemia; obesity; metabolic  
 XX syndrome X; wasting disorders; Von Hippel-Lindau (VHL) syndrome;  
 XX Alzheimer's disease; stroke; tuberculous sclerosis; hypercalcaemia;  
 XX Parkinson's disease; Huntington's disease; cerebral palsy; epilepsy;  
 XX Lesch-Nyhan syndrome; ataxia-telangiectasia; pain; depression; stress and  
 XX diabetes. The present DNA sequence represents a NOV1 gene PCR primer  
 XX  
 XX Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;  
 XX  
 XX Query Match 0.8%; Score 14.6; DB 1; Length 22;  
 XX Best Local Similarity 81.0%; Pred. No. 6.7e+02;  
 XX Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 XX  
 XX QY 886 GGGACATCATCAACATGCAC 906  
 XX |||||  
 XX DB 2 GGCAAAATCATCAACATCAAC 22  
 XX  
 XX RESULT 508  
 XX AAL43777  
 XX ID AAL43777 standard; DNA; 22 BP.  
 XX AC AAL43777;  
 XX XX  
 XX DT 26-SEP-2002 (first entry)  
 XX DE Human NOV1 gene PCR primer: SEQ ID NO 33.  
 XX  
 XX Human; PCR; primer; ss; gene therapy; vaccine; NOV1; NOVX; cancer;  
 XX neurodegenerative disorder; immune disorder; hematopoietic disorder;  
 XX dyslipidaemia; obesity; metabolic syndrome X; wasting disorder; pain;  
 XX Von Hippel-Lindau syndrome; Alzheimer's disease; stroke; cerebral palsy;  
 XX tuberculous sclerosis; hypercalcaemia; Parkinson's disease; epilepsy;  
 XX Huntington's disease; Lesch-Nyhan syndrome; ataxia-telangiectasia;

KW depression; stress; diabetes.  
 XX Homo sapiens.  
 XX WO200244211-A2.  
 XX PD 06-JUN-2002.  
 XX PF 29-NOV-2001; 2001WO-US048842.  
 XX PR 29-NOV-2000; 2000US-0253834P.  
 XX PR 25-JAN-2001; 2001US-0264180P.  
 XX PR 20-AUG-2001; 2001US-0313656P.  
 XX PA (CURA-) CURAGEN CORP.  
 XX PI Edinger SR, Macdougall JR, Millet I, Ellerman K, Stone DJ;  
 XX PI Gerlach VL, Grosse WM, Alsobrook JP, Lepley DM, Reiger DK;  
 XX PI Burgess CE, Casman SJ, Spytek KA, Boldog FL, Li L, Padigaru M;  
 XX PI Mishra V, Patturajan M, Shenoy SK, Rastelli L, Tchernev VT;  
 XX PI Vernet CAM, Zerhusen BD, Malyankar UM, Guo X, Miller CE;  
 XX PI Gangolli EA;  
 XX DR WPI; 2002-527702/56.  
 XX PT Novel cytoplasmic, nuclear, membrane bound and secreted NOVX  
 XX polypeptides, useful for treating cancers, neurodegenerative disorders,  
 XX immune disorders, hematopoietic disorders, diabetes and metabolic  
 XX disorders.  
 XX PS Example 3; Page 111; 155pp; English.  
 XX CC The invention comprises the amino acid and coding sequences of human  
 XX NOVX (NOV1 and NOV2) proteins. The NOVX proteins of the invention are  
 XX useful for identifying an agent (a cellular receptor or downstream  
 XX effector) that binds to a NOVX protein. The NOVX DNA and protein  
 XX sequences of the invention are useful for the treatment (gene therapy) or  
 XX prevention (vaccine) of: cancer; neurodegenerative disorders; immune  
 XX disorders; hematopoietic disorders; dyslipidaemia; obesity; metabolic  
 XX syndrome X; wasting disorders; Von Hippel-Lindau (VHL) syndrome;  
 XX Alzheimer's disease; stroke; tuberculous sclerosis; hypercalcaemia;  
 XX Parkinson's disease; Huntington's disease; cerebral palsy; epilepsy;  
 XX Lesch-Nyhan syndrome; ataxia-telangiectasia; pain; depression; stress and  
 XX diabetes. The present DNA sequence represents a NOV1 gene PCR primer  
 XX  
 XX Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;  
 XX  
 XX Query Match 0.8%; Score 14.6; DB 1; Length 22;  
 XX Best Local Similarity 81.0%; Pred. No. 6.7e+02;  
 XX Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 XX  
 XX QY 886 GGGACATCATCAACATGCAC 906  
 XX |||||  
 XX DB 2 GGCAAAATCATCAACATCAAC 22  
 XX  
 XX RESULT 509  
 XX AAL43795  
 XX ID AAL43795 standard; DNA; 22 BP.  
 XX AC AAL43795;  
 XX XX  
 XX DT 26-SEP-2002 (first entry)  
 XX DE Human NOV2 gene PCR primer: SEQ ID NO 51.  
 XX  
 XX Human; PCR; primer; ss; gene therapy; vaccine; NOV2; NOVX; cancer;  
 XX neurodegenerative disorder; immune disorder; hematopoietic disorder;  
 XX dyslipidaemia; obesity; metabolic syndrome X; wasting disorder; pain;  
 XX Von Hippel-Lindau syndrome; Alzheimer's disease; stroke; cerebral palsy;  
 XX tuberculous sclerosis; hypercalcaemia; Parkinson's disease; epilepsy;  
 XX Huntington's disease; Lesch-Nyhan syndrome; ataxia-telangiectasia;  
 XX depression; stress; diabetes.

XX OS Homo sapiens.  
 XX PN WO20024211-A2.  
 XX PD 06-JUN-2002.  
 XX PF 29-NOV-2001; 2001WO-US048842.  
 XX PR 29-NOV-2000; 2000US-0253834P.  
 XX PR 25-JAN-2001; 2001US-0264180P.  
 XX PR 20-AUG-2001; 2001US-0313656P.  
 XX PA (CURA-) CURAGEN CORP.  
 XX PI Edinger SR, Macdougall JR, Millett I, Ellerman K, Stone DJ;  
 PI Gerlach VL, Grosse WM, Alsobrook JP, Lepley DM, Reiger DK;  
 PI Burgess CE, Casman SJ, Spytek KA, Boldog FL, Li L, Padigaru M;  
 PI Mishra V, Patturajan M, Shenoy SK, Rastelli L, Tchernev VT;  
 PI Vernet CAM, Zethusen BD, Malyankar UM, Guo X, Miller CE;  
 PI Gangolli BA;  
 XX WPI; 2002-527702/56.  
 XX PR Novel cytoplasmic, nuclear, membrane bound and secreted NOX  
 PT polypeptides, useful for treating cancers, neurodegenerative disorders,  
 PT immune disorders, hematopoietic disorders, diabetes and metabolic  
 PT disorders.  
 XX Example 3; Page 130; 155pp; English.  
 XX The invention comprises the amino acid and coding sequences of human  
 CC NOVOX (NOV1 and NOV2) proteins. The NOVOX proteins of the invention are  
 CC useful for identifying an agent (a cellular receptor or downstream  
 CC effector) that binds to a NOVOX protein. The NOVOX DNA and protein  
 CC sequences of the invention are useful for the treatment (gene therapy) or  
 CC prevention (vaccine) of: cancer; neurodegenerative disorders; immune  
 CC disorders; hematopoietic disorders; dyslipidaemia; obesity; metabolic  
 CC syndrome X; wasting disorders; von Hippel-Lindau (VHL) syndrome;  
 CC Alzheimer's disease; stroke; tuberculous sclerosis; hypercalcaemia;  
 CC Parkinson's disease; Huntington's disease; cerebral palsy; epilepsy;  
 CC Lesch-Nyhan syndrome; ataxia-telangiectasia; pain; depression; stress and  
 CC diabetes. The present DNA sequence represents a NOV2 gene PCR primer  
 XX Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 14.6; DB 1; Length 22;  
 Best Local Similarity 81.0%; Pred. No. 6.7e+02;  
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 886 GGGAAATCATCATCAATGCAC 906  
 DB 2 GGC AAAATCATCATCAATGCAC 22  
 RESULT 510  
 ACID13238/C  
 ID ACD13238 standard; DNA; 22 BP.  
 XX AC ACD13238;  
 XX AC ACD13238;  
 XX DT 13-AUG-2003 (first entry)  
 XX DE Novel human protein associated PCR primer #6.  
 XX NOVX; autoimmune disease; allergy; Alzheimer's disease; stroke;  
 KW Parkinson's disease; Huntington's disease; multiple sclerosis; addiction;  
 KW anxiety; pain; diabetes; glomerulonephritis; obesity;  
 KW systemic lupus erythematosus; asthma; scleroderma; pancreatitis;  
 KW graft versus host disease; ulcer; anaemia; cancer; trauma; infection;  
 KW cardiomyopathy; atherosclerosis; hypertension; AIDS; Crohn's disease;  
 KW acquired immunodeficiency syndrome; chromosomal mapping; tissue typing;  
 KW forensic biology; predictive medicine; gene therapy; human; PCR; primer;

KW SS.  
 XX OS Homo sapiens.  
 XX PN WO200298900-A2.  
 XX PD 12-DEC-2002.  
 XX PF 04-JUN-2002; 2002WO-US017558.  
 XX PR 04-JUN-2001; 2001US-0295607P.  
 XX PR 04-JUN-2001; 2001US-0295661P.  
 XX PR 06-JUN-2001; 2001US-0296404P.  
 XX PR 06-JUN-2001; 2001US-0296418P.  
 XX PR 07-JUN-2001; 2001US-0296575P.  
 XX PR 11-JUN-2001; 2001US-0297414P.  
 XX PR 12-JUN-2001; 2001US-0297567P.  
 XX PR 15-JUN-2001; 2001US-0298528P.  
 XX PR 18-JUN-2001; 2001US-0299133P.  
 XX PR 19-JUN-2001; 2001US-0299230P.  
 XX PR 21-JUN-2001; 2001US-0299949P.  
 XX PR 22-JUN-2001; 2001US-0300177P.  
 XX PR 26-JUN-2001; 2001US-0300883P.  
 XX PR 28-JUN-2001; 2001US-0301530P.  
 XX PR 28-JUN-2001; 2001US-0301550P.  
 XX PR 03-JUL-2001; 2001US-0302951P.  
 XX PR 12-SEP-2001; 2001US-0318727P.  
 XX PR 27-SEP-2001; 2001US-0325685P.  
 XX PR 22-FEB-2002; 2002US-0358814P.  
 XX PR 03-JUN-2002; 2002US-00161927.  
 XX PA (CURA-) CURAGEN CORP.  
 XX Zethusen BD, Kekuda R, Spytek KA, Shenoy SG, Miller CE, Hjalte T;  
 PI Gerlach VL, Baumgartner JC, Guo X, Gangolli BA, Vernet CAM;  
 PI Padigaru M, Li L, Pena CEA, Gorman L, Anderson DW, Edinger SR;  
 PI Patturajan M, Stone DJ;  
 XX WPI; 2003-140585/13.  
 XX Novel isolated NOX polypeptide useful treating or preventing disorders  
 PT or syndromes such as autoimmune disease, allergies, Alzheimer's disease,  
 PT stroke, Parkinson's disease, Huntington's disease or multiple sclerosis.  
 XX Example 39; Page 241; 408pp; English.  
 XX The invention describes an isolated NOX polypeptide (I) comprising a  
 CC sequence selected from a sequence (SI) of 1121, 635, 239, 1720, 176, 583,  
 CC 214, 395, 1098, 134, 427, 1333, 407, 806, 804, 1253, 382, 1045, 284, 496,  
 CC 506, 759, 390, 133, 215, 240, 1069, 116, 439, 1138, 477, 316, 269, 219,  
 CC 305, 406, 460, 365, 380, 829 or 326 amino acids fully defined in the  
 CC specification, and the mature form of SI. (I) is useful for treating or  
 CC preventing a pathology associated with (I) in a subject, preferably  
 CC human, or for identifying an agent that binds to (I), where the agent is  
 CC a cellular receptor or a downstream effector. (I), a polynucleotide (II)  
 CC encoding (I) or an anti-(I)-antibody (V) is useful treating or preventing  
 CC disorders or syndromes such as autoimmune disease, allergies, Alzheimer's  
 CC disease, stroke, Parkinson's disease, Huntington's disease, multiple  
 CC sclerosis, addiction, anxiety, pain, diabetes, glomerulonephritis,  
 CC systemic lupus erythematosus, asthma, scleroderma, cancer, trauma, host  
 CC disease, pancreatitis, obesity, ulcers, anaemia, cancer, trauma, vital,  
 CC bacterial or parasitic infections, cardiomyopathy, atherosclerosis,  
 CC hypertension, acquired immunodeficiency syndrome (AIDS) or Crohn's  
 CC disease. (I), (II) or (V) is useful in screening assays, detection assays  
 CC (e.g., chromosomal mapping, tissue typing, forensic biology), predictive  
 CC medicine (e.g., diagnostic assays, prognostic assays, monitoring clinical  
 CC trials and pharmacogenomic), and in methods of treatment (e.g.,  
 CC therapeutic and prophylactic). (II) is useful in gene therapy, to express  
 CC (I), to detect NOX mRNA or a genetic lesion in a NOX gene, and to  
 CC modulate NOX activity. This sequence represents a primer used to isolate  
 CC DNA encoding a novel human NOX protein  
 XX Sequence 22 BP; 5 A; 6 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;  
Best Local Similarity 81.0%; Pred. No. 6.7e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 155 TGTCATGACACTCCAGGTG 175  
DB 22 TGTCTATGACACTGCAAGGAG 2

RESULT 511  
ABX72300  
ID ABX72300 standard; DNA; 22 BP.  
XX AC ABX72300;  
XX DT 03-JUN-2003 (first entry)  
XX DE Human NOVX DNA PCR primer #17.  
XX KW Human; NOVX; PCR; ss; metabolic disorder; cardiomyopathy; diabetes; ASD;  
KW hypertension; congenital heart defect; aortic stenosis; valve disease;  
KW atrial septal defect; atrioventricular canal defect; ductus arteriosus;  
KW pulmonary stenosis; subaortic stenosis; ventricular septal defect; VSD;  
KW tuberosus sclerosis; scleroderma; atherosclerosis; infectious disease;  
KW obesity; anorexia; neurodegenerative disorder; Alzheimer's disease;  
KW Parkinson's disease; immune disorder; haematopoietic disorder; priver;  
KW haemophilia; hypercoagulation; Crohn's disease; cancer.  
OS Homo sapiens.  
XX WO200281498-A2.  
XX PN 17-OCT-2002.  
XX PD 03-APR-2002; 2002WO-US010780.  
XX PF 03-APR-2001; 2001US-0281086P.  
XX PR 03-APR-2001; 2001US-0281136P.  
XX PR 05-APR-2001; 2001US-0281863P.  
XX PR 05-APR-2001; 2001US-0281906P.  
XX PR 08-APR-2001; 2001US-0282020P.  
XX PR 10-APR-2001; 2001US-0282930P.  
XX PR 10-APR-2001; 2001US-0283512P.  
XX PR 13-APR-2001; 2001US-0283710P.  
XX PR 17-APR-2001; 2001US-0284234P.  
XX PR 19-APR-2001; 2001US-0285325P.  
XX PR 20-APR-2001; 2001US-0285381P.  
XX PR 20-APR-2001; 2001US-0285609P.  
XX PR 23-APR-2001; 2001US-0285748P.  
XX PR 24-APR-2001; 2001US-0285890P.  
XX PR 24-APR-2001; 2001US-0286068P.  
XX PR 25-APR-2001; 2001US-0286292P.  
XX PR 27-APR-2001; 2001US-0287213P.  
XX PR 02-MAY-2001; 2001US-0288257P.  
XX PR 29-MAY-2001; 2001US-0294164P.  
XX PR 30-MAY-2001; 2001US-0294484P.  
XX PR 18-JUN-2001; 2001US-0298952P.  
XX PR 19-JUN-2001; 2001US-0299237P.  
XX PR 19-JUN-2001; 2001US-0299276P.  
XX PR 12-SEP-2001; 2001US-0318750P.  
XX PR 25-SEP-2001; 2001US-0324500P.  
XX PR 25-SEP-2001; 2001US-0324502P.  
XX PR 27-SEP-2001; 2001US-0325684P.  
XX PR 17-OCT-2001; 2001US-0330143P.  
XX PR 14-NOV-2001; 2001US-0332131P.  
XX PR 14-NOV-2001; 2001US-0332240P.  
XX PR 14-NOV-2001; 2001US-0332779P.  
XX PR 21-NOV-2001; 2001US-0332115P.  
XX PR 04-DEC-2001; 2001US-0337621P.  
XX PR 03-JAN-2002; 2002US-0345783P.  
XX PR 16-JAN-2002; 2002US-0350251P.

PR 02-APR-2002; 2002US-00114270.  
XX (CURA-) CURAGEN CORP.  
XX GUO X, Kekuda R, Miller CE, Malyankar UM, Spytek KA;  
PI Pattarajan M, Liu X, Gusev YI, Li L, Vernet CM, Zerhusen BD;  
PI Gorman L, Shenoy SG, Pena CE, Smithson G, Burgess CE, Gerlach V;  
PI Padigaru M, Shinkets RA, Gangoli EA, Taupier RJ, Casman SJ, Ji W;  
PI Anderson DW, Leite NW, Rastelli L, Edinger SR, Stone DJ;  
PI Macdougall JR, Rothenberg ME, Mazur A, Millet I, Peyman JA;  
PI Ellerman K;  
XX WFI; 2003-046858/04.  
XX New isolated NOVX polypeptide useful for treating atherosclerosis,  
PT metabolic disorders, diabetes, obesity, infectious disease, anorexia,  
PT neurodegenerative disorders, Alzheimer's disease and cancer.  
XX Example 83; Page 368; 666pp; English.  
XX The invention relates to human polypeptides, termed NOVX, and the  
CC polynucleotides encoding them. The polypeptides and polynucleotides are  
CC useful for diagnosing disease, and screening for potential therapeutic  
CC agents. The sequences are useful for treating metabolic disorders,  
CC cardiomyopathy, diabetes, hypertension, congenital heart defects, aortic  
CC stenosis, atrial septal defect (ASD), atrioventricular canal defect,  
CC ductus arteriosus, pulmonary stenosis, subaortic stenosis, ventricular  
CC septal defect (VSD), valve diseases, tuberosus sclerosis, scleroderma,  
CC atherosclerosis, obesity, infectious disease, anorexia, neurodegenerative  
CC disorders, Alzheimer's disease, Parkinson's disease, immune disorders,  
CC haematopoietic disorders, haemophilia, hypercoagulation, Crohn's disease  
CC and cancer. This sequence represents a PCR primer used to amplify a human  
CC NOVX polynucleotide of the invention  
XX SQ Sequence 22 BP; 9 A; 4 C; 5 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.6; DB 1; Length 22;  
Best Local Similarity 81.0%; Pred. No. 6.7e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 500 TCGGAACCTGGAGACTACAT 620  
DB 2 TAGGAAATGGAGCCTACAT 22

RESULT 512  
ACC80005  
ID ACC80005 standard; DNA; 22 BP.  
XX AC ACC80005;  
XX DT 25-JUL-2003 (first entry)  
XX DE Human HDAC9 exon 4 alternative 5' splice donor consensus sequence.  
XX KW Human; HDAC9; histone deacetylase 9; enzyme; cytostatic; cancer;  
XX leukaemia; ds.  
XX OS Homo sapiens.  
XX WO2003029451-A2.  
XX PD 10-APR-2003.  
XX PF 02-OCT-2002; 2002WO-GB004455.  
XX PR 02-OCT-2001; 2001GB-00023664.  
XX PA (CANC-) CANCER RES INST.  
XX PA (ZELE/) ZELEN A.  
XX PA (PETR/) PETRIE K.  
XX PA (GUID/) GUIDEZ F.

PI Zelent A, Petrie K, Guidez F;  
XX WPI; 2003-381634/36.  
XX  
XX New histone deacetylase 9 polypeptide, useful for screening for candidate  
PT compounds that share a, bind to, or inhibits the histone deacetylase 9  
PT biological activity, and for diagnosing or prognosing cancer, e.g.  
PT leukemia.  
XX  
XX Disclosure; Page 44; 71pp; English.  
XX  
XX The invention relates to an isolated polypeptide having histone  
CC deacetylase (HDAC) activity. Polypeptides and nucleic acids of the  
CC invention are useful for screening for candidate compounds that share,  
CC bind to, or inhibit histone deacetylase 9 (HDAC9) biological activity,  
CC and for diagnosing or prognosing cancer, e.g. leukemia such as TEL-AM1  
CC positive and negative pre-B cell acute lymphoblastic leukemia or B cell  
CC lymphoma. The current sequence the human HDAC9 exon 4 alternative 5'  
CC splice donor consensus sequence  
XX  
XX Sequence 22 BP; 8 A; 4 C; 8 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.6; DB 1; Length 22;  
Best Local Similarity 81.0%; Pred. No. 6.7e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
Qy 2 CGAAGCAGCGTAAGGATGGA 22  
Db 2 GGCACGAGGTAACGATGGA 22  
RESULT 513  
ADA00216/c  
ID ADA00216 standard; RNA; 22 BP.  
XX  
XX  
XX ADA00216;  
XX  
XX 06-NOV-2003 (first entry)  
DE Mouse and human miRNA sequence mir-C30 SEQ ID NO:213.  
XX  
XX Drosophila melanogaster; human; mouse; microRNA; miRNA; cytosstatic;  
KW gene therapy; diagnostic; therapeutic; developmental modulator;  
KW pathogenic modulator; cancer; B-cell chronic leukaemia;  
KW tissue reprogramming; ss.  
XX  
XX Homo sapiens.  
OS Mus sp.  
XX  
XX WO2003029459-A2.  
PN  
XX  
XX 10-APR-2003.  
PD  
XX  
XX 27-SEP-2002; 2002WO-EP010881.  
PF  
XX  
XX 28-SEP-2001; 2001EP-00123453.  
PR  
XX 22-MAR-2002; 2002EP-00006712.  
PR  
XX 26-JUL-2002; 2002EP-00016772.  
XX  
XX (PLAC) MAX PLANCK GES FOERDERUNG.  
PA  
XX  
XX Tuschl T, Lagos-Quintana M, Lendeckel W, Meyer J, Rauhut R;  
PI  
XX  
XX WPI; 2003-381637/36.  
DR  
XX  
XX New nucleic acid molecule for diagnostic and therapeutic applications and  
PT as a marker or a modulator of developmental or pathogenic processes, e.g.  
PT cancer, comprises microRNAs of a Drosophila melanogaster, a human or a  
PT mouse.  
XX  
XX Claim 1; Page 37; 138pp; English.  
PS  
XX  
XX The present invention describes an isolated nucleic acid molecule (I)

CC comprising a nucleotide sequence of Drosophila melanogaster, human or  
CC mouse microRNAs (miRNAs), or their precursors, a complement of it, a  
CC nucleotide sequence that has an affinity of at least 80 % to them or a  
CC nucleotide sequence that hybridises under stringent conditions to them.  
CC Also described: (1) a pharmaceutical composition containing the nucleic  
CC acid and, optionally, a carrier; and (2) identifying miRNA molecules or  
CC precursor molecules, comprising ligating 5'- and 3'-adapter molecules to  
CC the ends of a size-fractionated RNA population, reverse transcribing the  
CC adapter-containing RNA population and characterising the reverse  
CC transcription products. (I) has cytosstatic activity, and can be used in  
CC gene therapy. The pharmaceutical composition is useful for diagnostic and  
CC therapeutic applications, and as a marker or a modulator of developmental  
CC or pathogenic processes, particularly of cancer (e.g. B-cell chronic  
CC leukaemia) or gene expression. The miRNA molecules may also be used in  
CC tissue reprogramming procedures. The present sequence represents an miRNA  
CC sequence from the present invention.  
XX  
XX Sequence 22 BP; 6 A; 0 C; 10 G; 0 T; 6 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.6; DB 1; Length 22;  
Best Local Similarity 81.0%; Pred. No. 6.7e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
Qy 1482 CCACAACTTCCTGACACTAC 1502  
Db 22 CCACACACTTCCTTACATTC 2  
RESULT 514  
ABX17615  
ID ABX17615 standard; DNA; 22 BP.  
XX  
XX ABX17615;  
AC  
XX  
XX 05-FEB-2003 (first entry)  
DT  
XX  
XX RTQ-PCR primer #1 for human protein NOV27.  
DE  
XX  
XX Human; ss; NOVX; adrenoleukodystrophy; haemophilia; stoke; VHL; PCR;  
KW congenital adrenal hyperplasia; haemophilia; hypercoagulation;  
KW idiopathic thrombocytopenic purpura; autoimmune disease; allergy;  
KW immunodeficiencies; transplantation; Von Hippel-Lindau syndrome;  
KW Alzheimer's disease; tuberosus sclerosis; Parkinson's disease; epilepsy;  
KW Huntington's disease; cerebral palsy; Leach-Nyhan syndrome; pain;  
KW multiple sclerosis; ataxia-telangiectasia; leukodystrophy; anxiety;  
KW behavioural disorder; addition; neuroprotection; diabetes; ARDS;  
KW renal artery stenosis; interstitial nephritis; glomerulonephritis;  
KW polycystic kidney disease; systemic lupus erythematosus; IGA; primer;  
KW renal tubular acidosis; immunoglobulin A nephropathy; hypercalcaemia;  
KW cirrhosis; transplantation; asthma; emphysema; scleroderma; GVHD;  
KW adult respiratory distress syndrome; graft versus host disease;  
KW lymphedema; fertility; pancreatitis; obesity; haemophilia; ulcer;  
KW anaemia; cancer; trauma; regeneration; infection; RTQ-PCR;  
KW real-time quantitative PCR.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO200281629-A2.  
PN  
XX  
XX 17-OCT-2002.  
PD  
XX  
XX 03-APR-2002; 2002WO-US010522.  
PF  
XX  
XX 03-APR-2001; 2001US-0281086P.  
PR  
XX 03-APR-2001; 2001US-0281136P.  
PR  
XX 05-APR-2001; 2001US-0281863P.  
PR  
XX 05-APR-2001; 2001US-0281906P.  
PR  
XX 06-APR-2001; 2001US-0282020P.  
PR  
XX 10-APR-2001; 2001US-0282934P.  
PR  
XX 12-APR-2001; 2001US-0283512P.  
PR  
XX 19-APR-2001; 2001US-0285325P.  
PR  
XX 23-APR-2001; 2001US-0285890P.  
PR  
XX 24-APR-2001; 2001US-0286068P.  
PR



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RESULT 516
ADD72131
ID ADD72131 standard; DNA; 22 BP.
XX
AC ADD72131;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human NOV1 RTQ PCR set Ag1865 primer #1.
XX
KW Human; ss; PCR; NOVX; endozepine-like protein; metabolic disorder;
KW diabetes; obesity; infectious disease; anorexia; cancer;
KW cardiovascular disease; hypertension; atherosclerosis;
KW neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
KW epilepsy; immune disorder; osteoarthritis; haematopoietic disorder;
KW inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis;
KW cell differentiation; cell proliferation; haematopoiesis; wound healing;
KW angiogenesis; gene therapy; primer; RTQ-PCR; real time quantitative PCR.
XX
OS Homo sapiens.
XX
PN US2003195149-A1.
XX
PD 16-OCT-2003.
XX
PF 29-NOV-2001; 2001US-00997594.
XX
PR 29-NOV-2000; 2000US-0253834P.
XX
PR 25-JAN-2001; 2001US-0264180P.
XX
PR 20-AUG-2001; 2001US-0313656P.
XX
PA (GANG/) GANGOLLI E A.
XX
PA (STON/) STONE D J.
XX
PI Gangolli EA, Stone DJ;
XX
DR WPI; 2003-844478/78.
XX
New isolated NOVX polypeptides and polynucleotides, useful for
PT preventing, diagnosing or treating NOVX-associated disorders, e.g.
PT osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
PT asthma, or infections.
XX
Example 4; SEQ ID NO 18; 89pp; English.
XX
The invention relates to an isolated NOVX polypeptide comprising 3 NOV1
CC protein variants (NOV1a, NOV1c and NOV1d) and NOV2 (appearing as
CC ADD72118, ADD72120 and ADD72123, all being endozepine-like proteins); a
CC mature form of NOVX; or a sequence that is at least 95% identical to, or
CC having one or more conservative amino acid substitutions in, the NOVX
CC proteins. Also included are a composition comprising NOVX and a carrier,
CC methods for determining the presence of or predisposition to a disease
CC associated with altered levels of expression of NOVX or NOVX nucleic acid
CC molecule in a first mammalian subject, a method of identifying an agent
CC that binds to NOVX, a method for identifying a potential therapeutic
CC agent for use in the treatment of a pathology which is related to
CC aberrant expression or interactions of NOVX, a method for screening for a
CC modulator of activity or of latency or predisposition to a pathology
CC associated with NOVX, a method for modulating the activity of NOVX, a
CC methods of treating or preventing a pathology associated with NOVX, a
CC method for treating a pathological state in a mammal, an isolated nucleic
CC acid molecule encoding NOVX (including their variants), a vector
CC comprising the nucleic acid molecule, a cell comprising the vector, an
CC antibody that binds immunospecifically to NOVX and a method for producing
CC NOVX. The polypeptides, nucleic acid molecules and antibodies are useful
CC in the manufacture of a medicament for treating a syndrome associated
CC with a human disease, preferably a NOVX-associated disorder. The nucleic
CC acid molecules, polypeptides and antibodies are useful for treating,
CC preventing or diagnosing diseases such as metabolic disorders, diabetes,
CC obesity, infectious diseases (viral, bacterial, fungal, helminthic, and
CC protozoal), anorexia, cancer, cardiovascular diseases (hypertension,
CC atherosclerosis), neurodegenerative disorders, Alzheimer's disease,

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CC Parkinson's disease, epilepsy, immune disorders (osteoarthritis),
CC haematopoietic disorders, inflammatory skin disorders, asthma, and
CC various dyslipidaemias. The nucleic acids and polypeptides may also be
CC used as targets for the identification of small molecules that modulate
CC or inhibit e.g. neurogenesis, cell differentiation, cell proliferation,
CC haematopoiesis, wound healing and angiogenesis, in gene therapy, in
CC generation of antibodies that bind immunospecifically to NOVX substances
CC for use in therapeutic or diagnostic methods. The nucleic acids are
CC further used as hybridisation probes, in chromosome mapping, tissue
CC typing, preventive medicine, and pharmacogenomics. The present sequence
CC represents an RTQ (real time quantitative) PCR primer used to assay
CC tissue/cell specific expression of NOVX.
XX
SQ Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 6.7e-02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 886 GGGAACATCATCAACATGCAC 906
DB 2 GGCAAAATCATCAACATCAAC 22
RESULT 517
ADD72152
ID ADD72152 standard; DNA; 22 BP.
XX
AC ADD72152;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human NOV2 RTQ PCR set Ag1865 primer #1.
XX
KW Human; ss; PCR; NOVX; endozepine-like protein; metabolic disorder;
KW diabetes; obesity; infectious disease; anorexia; cancer;
KW cardiovascular disease; hypertension; atherosclerosis;
KW neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
KW epilepsy; immune disorder; osteoarthritis; haematopoietic disorder;
KW inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis;
KW cell differentiation; cell proliferation; haematopoiesis; wound healing;
KW angiogenesis; gene therapy; primer; RTQ-PCR; real time quantitative PCR.
XX
OS Homo sapiens.
XX
PN US2003195149-A1.
XX
PD 16-OCT-2003.
XX
PF 29-NOV-2001; 2001US-00997594.
XX
PR 29-NOV-2000; 2000US-0253834P.
XX
PR 25-JAN-2001; 2001US-0264180P.
XX
PR 20-AUG-2001; 2001US-0313656P.
XX
PA (GANG/) GANGOLLI E A.
XX
PA (STON/) STONE D J.
XX
PI Gangolli EA, Stone DJ;
XX
DR WPI; 2003-844478/78.
XX
New isolated NOVX polypeptides and polynucleotides, useful for
PT preventing, diagnosing or treating NOVX-associated disorders, e.g.
PT osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
PT asthma, or infections.
XX
Example 4; SEQ ID NO 39; 89pp; English.
XX
The invention relates to an isolated NOVX polypeptide comprising 3 NOV1
CC protein variants (NOV1a, NOV1c and NOV1d) and NOV2 (appearing as
CC ADD72118, ADD72120 and ADD72123, all being endozepine-like proteins); a
CC mature form of NOVX; or a sequence that is at least 95% identical to, or
CC having one or more conservative amino acid substitutions in, the NOVX
CC proteins. Also included are a composition comprising NOVX and a carrier,
CC methods for determining the presence of or predisposition to a disease
CC associated with altered levels of expression of NOVX or NOVX nucleic acid
CC molecule in a first mammalian subject, a method of identifying an agent
CC that binds to NOVX, a method for identifying a potential therapeutic
CC agent for use in the treatment of a pathology which is related to
CC aberrant expression or interactions of NOVX, a method for screening for a
CC modulator of activity or of latency or predisposition to a pathology
CC associated with NOVX, a method for modulating the activity of NOVX, a
CC methods of treating or preventing a pathology associated with NOVX, a
CC method for treating a pathological state in a mammal, an isolated nucleic
CC acid molecule encoding NOVX (including their variants), a vector
CC comprising the nucleic acid molecule, a cell comprising the vector, an
CC antibody that binds immunospecifically to NOVX and a method for producing
CC NOVX. The polypeptides, nucleic acid molecules and antibodies are useful
CC in the manufacture of a medicament for treating a syndrome associated
CC with a human disease, preferably a NOVX-associated disorder. The nucleic
CC acid molecules, polypeptides and antibodies are useful for treating,
CC preventing or diagnosing diseases such as metabolic disorders, diabetes,
CC obesity, infectious diseases (viral, bacterial, fungal, helminthic, and
CC protozoal), anorexia, cancer, cardiovascular diseases (hypertension,
CC atherosclerosis), neurodegenerative disorders, Alzheimer's disease,

```

CC having one or more conservative amino acid substitutions in, the NOVX  
CC proteins. Also included are a composition comprising NOVX and a carrier,  
CC methods for determining the presence of or predisposition to a disease  
CC associated with altered levels of expression of NOVX or NOVX nucleic acid  
CC molecule in a first mammalian subject, a method of identifying an agent  
CC that binds to NOVX, a method for identifying a potential therapeutic  
CC agent for use in the treatment of a pathology which is related to  
CC aberrant expression or interactions of NOVX, a method for screening for a  
CC modulator of activity or of latency or predisposition to a pathology  
CC associated with NOVX, a method for modulating the activity of NOVX, a  
CC method of treating or preventing a pathology associated with NOVX, a  
CC method for treating a pathological state in a mammal, an isolated nucleic  
CC acid molecule encoding NOVX (including their variants), a vector  
CC comprising the nucleic acid molecule, a cell comprising the vector, an  
CC antibody that binds immunospecifically to NOVX and a method for producing  
CC NOVX. The polypeptides, nucleic acid molecules and antibodies are useful  
CC in the manufacture of a medicament for treating a syndrome associated  
CC with a human disease, preferably a NOVX-associated disorder. The nucleic  
CC acid molecules, polypeptides and antibodies are useful for treating,  
CC preventing or diagnosing diseases such as metabolic disorders, diabetes,  
CC obesity, infectious diseases (viral, bacterial, fungal, helminthic, and  
CC protozoal), anorexia, cancer, cardiovascular diseases (hypertension,  
CC atherosclerosis), neurodegenerative disorders, Alzheimer's disease,  
CC Parkinson's disease, epilepsy, immune disorders (osteoarthritis),  
CC haematopoietic disorders, inflammatory skin disorders, asthma, and  
CC various dyslipidaemias. The nucleic acids and polypeptides may also be  
CC used as targets for the identification of small molecules that modulate  
CC or inhibit e.g. neurogenesis, cell differentiation, cell proliferation,  
CC haematopoiesis, wound healing and angiogenesis, in gene therapy, in  
CC generation of antibodies that bind immunospecifically to NOVX substances  
CC for use in therapeutic or diagnostic methods. The nucleic acids are  
CC further used as hybridisation probes, in chromosome mapping, tissue  
CC typing, preventive medicine, and pharmacogenomics. The present sequence  
CC represents an RTQ (real time quantitative) PCR primer used to assay  
CC tissue/cell specific expression of NOVX.

XX  
SQ Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;  
Best Local Similarity 81.0%; Pred. No. 6.7e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 886 GGGACATCATCAACATGCAC 906  
DB 2 GGCACATCATCAACATCAAC 22

RESULT 518  
ADD72164

ID ADD72164 standard; DNA; 22 BP.

XX AC ADD72164;

XX DT 29-JAN-2004 (first entry)

XX DE Human NOV2 RTQ PCR set Ag2029 primer #1.

XX KW Human; ss; PCR; NOVX; endoepine-like protein; metabolic disorder;  
KW diabetes; obesity; infectious disease; anorexia; cancer;  
KW cardiovascular disease; hypertension; atherosclerosis;  
KW neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;  
KW epilepsy; immune disorder; osteoarthritis; haematopoietic disorder;  
KW inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis;  
KW cell differentiation; cell proliferation; haematopoiesis; wound healing;  
KW angiogenesis; gene therapy; primer; RTQ-PCR; real time quantitative PCR.

XX OS Homo sapiens.

XX FN US2003195149-A1.

XX PD 16-OCT-2003.

XX XX 29-NOV-2001; 2001US-00997594.

XX 29-NOV-2000; 2000US-0253834P.  
PR 25-JAN-2001; 2001US-0264180P.  
PR 20-AUG-2001; 2001US-0313656P.  
XX (GANG/) GANGOLLI E A.  
PA (STON/) STONE D J.  
XX Gangolli EA, Stone DU;  
XX WPI; 2003-844478/78.  
XX New isolated NOVX polypeptides and polynucleotides, useful for  
PT preventing, diagnosing or treating NOVX-associated disorders, e.g.  
PT osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,  
PT asthma, or infections.  
XX Example 4; SEQ ID NO 51; 89pp; English.  
XX The invention relates to an isolated NOVX polypeptide comprising 3 NOVX  
CC protein variants (NOV1a, NOV1c and NOV1d) (appearing as  
CC ADD72118, ADD72120 and ADD72123, all being endopeptin-like proteins); a  
CC mature form of NOVX; or a sequence that is at least 95% identical to, or  
CC having one or more conservative amino acid substitutions in, the NOVX  
CC proteins. Also included are a composition comprising NOVX and a carrier,  
CC methods for determining the presence of or predisposition to a disease,  
CC associated with altered levels of expression of NOVX or NOVX nucleic acid  
CC molecule in a first mammalian subject, a method of identifying an agent  
CC that binds to NOVX, a method for identifying a potential therapeutic  
CC agent for use in the treatment of a pathology which is related to  
CC aberrant expression or interactions of NOVX, a method for screening for a  
CC modulator of activity or of latency or predisposition to a pathology  
CC associated with NOVX, a method for modulating the activity of NOVX, a  
CC method of treating or preventing a pathology associated with NOVX, a  
CC acid molecule encoding NOVX (including their variants), a vector  
CC comprising the nucleic acid molecule, a cell comprising the vector, an  
CC antibody that binds immunospecifically to NOVX and a method for producing  
CC NOVX. The polypeptides, nucleic acid molecules and antibodies are useful  
CC in the manufacture of a medicament for treating a syndrome associated  
CC with a human disease, preferably a NOVX-associated disorder. The nucleic  
CC acid molecules, polypeptides and antibodies are useful for treating,  
CC preventing or diagnosing diseases such as metabolic disorders, diabetes,  
CC obesity, infectious diseases (viral, bacterial, fungal, helminthic, and  
CC protozoal), anorexia, cancer, cardiovascular diseases (hypertension,  
CC atherosclerosis), neurodegenerative disorders, Alzheimer's disease,  
CC Parkinson's disease, epilepsy, immune disorders (osteoarthritis),  
CC haematopoietic disorders, inflammatory skin disorders, asthma, and  
CC various dyslipidaemias. The nucleic acids and polypeptides may also be  
CC used as targets for the identification of small molecules that modulate  
CC or inhibit e.g. neurogenesis, cell differentiation, cell proliferation,  
CC haematopoiesis, wound healing and angiogenesis, in gene therapy, in  
CC generation of antibodies that bind immunospecifically to NOVX substances  
CC for use in therapeutic or diagnostic methods. The nucleic acids are  
CC further used as hybridisation probes, in chromosome mapping, tissue  
CC typing, preventive medicine, and pharmacogenomics. The present sequence  
CC represents an RTQ (real time quantitative) PCR primer used to assay  
CC tissue/cell specific expression of NOVX.

XX  
SQ Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.6; DB 1; Length 22;  
Best Local Similarity 81.0%; Pred. No. 6.7e+02;  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 886 GGGACATCATCAACATGCAC 906  
DB 2 GGCACATCATCAACATCAAC 22

RESULT 519  
ADD72146

ID ADD72146 standard; DNA; 22 BP.









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PD 11-JUN-1998.
XX
XX 02-DEC-1997; 97WO-US021748.
XX
XX 03-DEC-1996; 96US-00758306.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Stinchcomb DT, Mcswiggen JA;
XX
XX WPI; 1998-333332/29.
XX
XX Ribozymes targetted to interleukin 2 - useful for treating e.g. cancer,
XX autoimmune disease and allergies.
XX
XX Claim 4; Page 37; 61pp; English.
XX
XX The present sequence invention describes ribozymes targetted to modulate
XX the synthesis and/or expression of interleukin (IL)-2R gamma encoded RNA.
XX
XX AA953889 to AA954574 represent specifically claimed ribozymes, and
XX AA954575 to AA955260 represent specifically claimed substrate sequences
XX from the present invention. The ribozymes can be used for the treatment
XX of, e.g. graft rejection, autoimmune disease, cancer, psoriasis, allergy
XX and other inflammatory conditions. The ribozymes are also used to induce
XX tolerance in a recipient to alloantigen from a donor
XX
XX Sequence 17 BP; 1 A; 7 C; 3 G; 0 T; 6 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.4; DB 1; Length 17;
XX Best Local Similarity 56.2%; Pred. No. 5.6e+02;
XX Matches 9; Conservative 6; Mismatches 1; Indels 0; Gaps 0;
XX
QY 1456 TTCTTCCTCAGTCGCG 1471
DB 1 UUCUCCUCCAGUCUGG 16

RESULT 524
AAT86543/c
ID AAT86543 standard; DNA; 17 BP.
XX
XX AAT86543;
XX
XX 25-MAR-2003 (revised)
XX 20-MAR-1998 (first entry)
XX
XX Membrane extracellular peptide fragment of immunoglobulin primer.
XX
XX Membrane bound; immunoglobulin A; anti-IgA antibody; immunogen;
XX B-cell leukemia; lymphoma; IGA-mediated nephropathy; diagnosis; PCR;
XX primer; probe; ss.
XX
XX Homo sapiens.
XX
XX US5690934-A.
XX
XX 25-NOV-1997.
XX
XX 20-MAR-1996; 96US-00619790.
XX
XX 31-DEC-1987; 87US-00140036.
XX 29-JUL-1988; 88US-00226421.
XX 05-AUG-1988; 88US-00229178.
XX 16-NOV-1988; 88US-00272243.
XX 21-JUN-1989; 89US-00369479.
XX 21-JUN-1989; 89US-00369625.
XX 22-DEC-1989; 89US-00455080.
XX 23-JAN-1990; 90US-00468766.
XX 27-APR-1990; 90US-00515604.
XX 16-SEP-1991; 91US-00760765.
XX 09-OCT-1992; 92US-00973321.
XX 09-JUL-1993; 93US-00090527.
XX 20-JUL-1993; 93US-00095068.

14-OCT-1993; 93US-00137253.
22-OCT-1993; 93US-00140721.
11-JAN-1994; 94US-00180145.
26-MAY-1994; 94US-00249558.
XX
XX (TANO-) TANOX BIOSYSTEMS INC.
XX
XX Chang TW, Chang NT;
XX
XX WPI; 1998-017568/02.
XX
XX Peptide fragments of human membrane-bound immunoglobulin A - for
XX generating anti-IgA antibodies, useful for treatment of B-cell
XX leukaemia(s) or lymphoma(s) or IGA-mediated nephropathy.
XX
XX Example 1; Col 11-12; 10pp; English.
XX
XX PCR primers AAT86543-4 were used to amplify genomic DNA segments from the
XX purified DNA of positive clones identified by the probe AAT86542. An
XX oligonucleotide probe (AAT86542) which corresponds to a segment located
XX in the CH3 coding region of immunoglobulin allotype alpha1 and alpha2 and
XX was synthesized and used as a probe to screen phage clones containing oil
XX or alpha2 gene segments. The library was constructed using genomic DNA
XX from human lung fibroblast line, WI38, packaged in phage FIX. Primer
XX AAT86543 is located in the intron about 1kb downstream from CH3 exon and
XX primer AAT86544 is a very conservative segment in the mouse alpha
XX membrane exon. The invention relates to a unique extracellular peptide
XX segment present on B cell-bound but not secreted IGA. These extracellular
XX peptide segments form, entirely or in part, antigenic epitopes unique to
XX membrane bound but not secreted IGA, and thereby provide a unique epitope
XX on the IGA-bearing B cells to which membrane bound IGA is attached. These
XX peptide segments can be used as immunogens to generate antibodies which
XX specifically target membrane-bound IGA and IGA-bearing B cells. (Updated
XX on 25-MAR-2003 to correct PR field.)
XX
XX Sequence 17 BP; 2 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.4; DB 1; Length 17;
XX Best Local Similarity 93.8%; Pred. No. 5.6e+02;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 1273 GAGACGTGGCCAGGCA 1288
DB 17 GAGACTTGGCCAGGCA 2

RESULT 525
ABK03441/c
ID ABK03441 standard; RNA; 17 BP.
XX
XX ABK03441;
XX
XX 12-MAR-2002 (first entry)
XX
XX Human CD20 G-cleaver #56.
XX
XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
XX cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
XX muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
XX DNazyme; inozyme; G-cleaver; ambersyme; zinzyme; lymphoma; leukaemia;
XX B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
XX human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
XX MCL; immunocytooma; IMC; immune thrombocytopaenia; stroke; dementia;
XX inflammatory arthropathy; central nervous system injury;
XX cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
XX chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
XX Parkinson's disease; ataxia; Huntington's disease;
XX Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
XX Homo sapiens.
XX
XX Synthetic.
XX
XX WO200159103-A2.

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XX PD 16-AUG-2001.  
XX PF  
XX PS  
XX PR 11-FEB-2000; 2000US-0181797P.  
XX PR 28-FEB-2000; 2000US-0185516P.  
XX PR 06-MAR-2000; 2000US-0187128P.  
XX PR  
XX PA (RIBO-) RIBOZYME PHARM INC.  
XX PA (BLAT/) BLATT L.  
XX PA (MCSW/) MCSWIGGEN J.  
XX PA (CHOW/) CHOWRIRA B M.  
XX PI Blatt L, Mcswiggen J, Chowrira BM;  
XX DR WPI; 2001-607195/69.  
XX  
XX PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
XX PT constructs, which down regulate expression of a CD20 gene or neurite  
XX PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
XX PT central nervous system injury.  
XX PS Claim 30; Page 152; 200pp; English.  
XX CC The invention relates to a nucleic acid molecule which down regulates  
XX CC expression of a CD20 gene and a nucleic acid molecule which down  
XX CC regulates expression of a neurite growth inhibitor gene (NGO). The  
XX CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
XX CC DNzyme) an inozyme (an endolytic nucleic acid cleaving a an RNA molecule  
XX CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr  
XX CC an ambezyme (cleaving RNA with an NGN triplet), a zinyzyme (cleaving RNA  
XX CC with a XYV motif). The CD20-targetting nucleic acid is used to cleave RNA  
XX CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
XX CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
XX CC the cell and treat a patient having a condition associated with the level  
XX CC of CD20. The treatment may further comprise the use of one or more  
XX CC therapies. In particular, the CD20-targetting nucleic acid may be used to  
XX CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
XX CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
XX CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
XX CC lymphoma (MCL), immunocytooma (IMC), small B-cell lymphocytic lymphoma,  
XX CC immune thrombocytopenia, and inflammatory arthropathy. The NGO-  
XX CC targeting nucleic acid is used to cleave RNA of the NGO gene in the  
XX CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
XX CC nucleic acid may be contacted with a cell to reduce NGO activity of the  
XX CC cell and treat a patient having a condition associated with the level of  
XX CC NGO. The treatment may further comprise the use of one or more  
XX CC therapies. In particular, the NGO-targetting nucleic acid may be used to  
XX CC treat central nervous system (CNS) injury and cerebrovascular accident  
XX CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
XX CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
XX CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
XX CC disease, muscular dystrophy, and/or other neurodegenerative disease  
XX CC states which respond to the modulation of NGO expression. The present  
XX CC sequence is a G-cleaver molecule of the invention  
XX SQ Sequence 17 BP; 4 A; 4 C; 6 G; 0 T; 3 U; 0 Other;  
Query Match 0.8%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. NO. 5.6e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 395 ATGAGGTGCAGTCTCC 410  
DB 17 ATCAGGTGCAGTCTCC 2  
RESULT 526  
ABA80084/c  
ID ABA80084 standard; DNA; 17 BP.  
XX AC ABA80084;

XX DT 24-JAN-2002 (first entry)  
XX DE HBA2 mutation correcting oligonucleotide SEQ ID NO: 2930.  
XX DE  
XX KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;  
XX KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;  
XX KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;  
XX KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;  
XX KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;  
XX KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;  
XX KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSN1; antisense;  
XX KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;  
XX KW Alzheimer's disease; cytosstatic; antitickling; antianaemic; haemostatic;  
XX KW antileptic; ss.  
XX OS Homo sapiens.  
XX PN WO200173002-A2.  
XX PD 04-OCT-2001.  
XX PF 27-MAR-2001; 2001WO-US009761.  
XX PR 27-MAR-2000; 2000US-0192176P.  
XX PR 27-MAR-2000; 2000US-0192179P.  
XX PR 01-JUN-2000; 2000US-0208538P.  
XX PR 30-OCT-2000; 2000US-0244989P.  
XX PA (UYDE ) UNIV DELAWARE.  
XX PX Kmiec EB, Gamper HB, Rice MC;  
XX PX WPI; 2001-639230/73.  
XX PT Oligonucleotide for targeted alterations of genetic sequences and for  
XX PT treating cystic fibrosis, comprises at least one mismatch and chemical  
XX PS modification.  
XX PS Claim 7; Page 207; 294pp; English.  
XX CC The present invention provides single-stranded oligonucleotides which can  
XX CC be used for the targeted alteration of genomic sequences, where the  
XX CC oligonucleotide has at least one mismatch compared with the genomic  
XX CC sequence to be altered. In particular, these sequences are directed at  
XX CC the following genes: adenosine deaminase, p53, beta-globin,  
XX CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A  
XX CC (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus  
XX CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,  
XX CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase  
XX CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSN1) and  
XX CC presenilin-2 (PSN2). These can be used in the gene therapy of diseases  
XX CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,  
XX CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,  
XX CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and  
XX CC various syndromes. The present sequence is one of the gene correcting  
XX CC oligonucleotides of the invention  
XX SQ Sequence 17 BP; 3 A; 6 C; 5 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. NO. 5.6e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1631 CCAGCAGGCAGCGGCT 1646  
DB 17 CCAGCAGGCAGCGGCT 2  
RESULT 527  
ABA80085  
ID ABA80085 standard; DNA; 17 BP.  
XX AC

AC ABA80085;  
XX  
DT 24-JAN-2002 (first entry)  
XX  
DE HBA2 mutation correcting oligonucleotide SEQ ID NO: 2931.  
XX  
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;  
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;  
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;  
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;  
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;  
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;  
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;  
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;  
KW Alzheimer's disease; cytosstatic; antileukemic; haemostatic;  
KW antileukemic; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200173002-A2.  
XX  
PD 04-OCT-2001.  
XX  
PF 27-MAR-2001; 2001WO-US009761.  
XX  
PR 27-MAR-2000; 2000US-0192176P.  
XX  
PR 27-MAR-2000; 2000US-0192179P.  
XX  
PR 01-JUN-2000; 2000US-0208538P.  
XX  
PR 30-OCT-2000; 2000US-0244989P.  
XX  
XX (UYDE ) UNIV DELAWARE.  
PA  
XX Kmiec EB, Gamper HB, Rice MC;  
XX  
XX WPI; 2001-639230/73.  
DR  
XX Oligonucleotide for targeted alterations of genetic sequences and for  
PT treating cystic fibrosis, comprises at least one mismatch and chemical  
PT modification.  
XX  
PS Claim 7; Page 207; 294pp; English.  
XX  
XX The present invention provides single-stranded oligonucleotides which can  
XX be used for the targeted alteration of genomic sequences, where the  
XX oligonucleotide has at least one mismatch compared with the genomic  
XX sequence to be altered. In particular, these sequences are directed at  
XX the following genes: adenosine deaminase, p53, beta-globin,  
XX retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A  
XX (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus  
XX 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,  
XX apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase  
XX (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and  
XX presenilin-2 (PSEN2). These can be used in the gene therapy of diseases  
XX such as cancer, adenosine deaminase deficiency, cystic fibrosis,  
XX haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,  
XX Alzheimer's disease, melanoma, adenomatous polyposis of the colon and  
XX various syndromes. The present sequence is one of the gene correcting  
XX oligonucleotides of the invention.  
XX  
SQ Sequence 17 BP; 3 A; 5 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 5.6e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1631 CCAGCAGGCGAGGGCT 1646  
DB 1 CCAGCAGGCGAGGGCT 16  
RESULT 528  
AAC83038/c  
ID AAC83038 standard; DNA; 17 BP.

XX AAC83038;  
AC  
XX 22-FEB-2001 (first entry)  
DT  
XX Primer #3 used to isolate dog beta-galactosidase cDNA.  
DE  
XX Portuguese water dog; beta galactosidase; R60H; GM1-gangliosidosis;  
KW primer: ss.  
XX  
XX Canis familiaris.  
OS  
XX US6140115-A.  
PN  
XX 31-OCT-2000.  
PD  
XX 09-NOV-1999; 99US-00436605.  
XX  
XX 09-NOV-1999; 99US-00436605.  
PR  
XX (KOLO/) KOLODNY E H.  
PA (WANG/) WANG Z.  
XX (RAGH/) RAGHAVAN S.  
PA (ZENG/) ZENG B.  
XX  
XX Kolodny EH, Wang Z, Raghavan S, Zeng B;  
PI  
XX WPI; 2001-006329/01.  
DR  
XX New beta-galactosidase gene isolated from Canis familiaris, useful for  
PT screening R60H mutation of acid beta-galactosidase, or for screening  
PT Portuguese water dogs to eliminate carriers of GM1-gangliosidosis from  
PT breeding programs.  
XX  
XX Example 4; Col 10; 27pp; English.  
XX  
XX The present invention relates to canine beta-galactosidase. The cDNA  
CC molecule and kit are useful for screening the R60H mutation of acid beta-  
CC galactosidase. The cDNA molecule is also useful for screening Portuguese  
CC water dogs to eliminate carriers of GM1-gangliosidosis from breeding  
CC programs  
XX  
SQ Sequence 17 BP; 2 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 5.6e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 41 CAGGAGGACCGAGCT 56  
DB 17 CAGGATGACCGAGCT 2  
RESULT 529  
AAF91027/c  
ID AAF91027 standard; DNA; 17 BP.  
XX  
XX AAF91027;  
AC  
XX 04-MAY-2001 (first entry)  
DT  
XX Human multi drug resistance-1 gene related sequence SEQ ID NO: 114.  
DE  
XX Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;  
KW inflammatory disease; neuronal disease; CNS disease;  
KW cardiovascular disease; PCR primer; ss.  
XX  
XX Homo sapiens.  
OS  
XX WO200109183-A2.  
PN  
XX 08-FEB-2001.  
PD  
XX

```
PF 28-JUL-2000; 2000WO-EP007314.
XX
XX
PR 30-JUL-1999; 99EP-00114938.
PR 22-FEB-2000; 2000EP-00103361.
XX
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
XX Brinkmann U, Hoffmeyer S, Eichelbaum M, Roots I;
XX
XX WPI; 2001-159855/16.
XX
XX New polynucleotide encoding a molecular variant Multi Drug Resistance
PT (MDR)-1 polypeptide is useful for diagnosing and treating diseases
PT associated with abnormal MDR-1 expression or function, e.g. cancer.
XX
XX Claim 36; Page 100; 154pp; English.
XX
XX The present invention provides nucleotides encoding molecular variants of
CC the human multi drug resistance-1 (MDR-1) protein. These can be used to
CC identify compounds capable of treating multidrug resistance and
CC sensitivity interfering resulting from polymorphisms in MDR-1, which can
CC lead to difficulties in treating cancer, cardiovascular, neuronal,
CC inflammatory and CNS diseases
XX
XX SQ Sequence 17 BP; 5 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. NO. 5.6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 52 GCAGTGTGACTGCTGA 67
Db 16 GCAATGTGACTGCTGA 1
RESULT 530
ABV78818/c
ID ABV78818 standard; DNA; 17 BP.
XX
XX AC ABV78818;
XX
XX 03-JAN-2003 (first entry)
XX
XX Human HTPL scanning oligonucleotide SEQ ID 64.
XX
XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
XX human testis expressed Patched like protein; testis; adrenal; liver;
XX male germ cell development; bone marrow; brain; kidney; lung; placenta;
XX prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
XX OS Homo sapiens.
XX
XX PN EP1229046-A2.
XX
XX PD 07-AUG-2002.
XX
XX PF 28-JAN-2002; 2002EP-00001167.
XX
XX PR 30-JAN-2001; 2001WO-US000663.
XX PR 30-JAN-2001; 2001WO-US000664.
XX PR 30-JAN-2001; 2001WO-US000665.
XX PR 30-JAN-2001; 2001WO-US000667.
XX PR 30-JAN-2001; 2001WO-US000668.
XX PR 30-JAN-2001; 2001WO-US000669.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 09-OCT-2001; 2001US-0327898P.
XX
XX PA (AEOM-) AEOMICA INC.
XX
XX FI Zhan J;
XX
XX WPI; 2002-676582/73.
XX
XX
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```
PT Novel isolated human testis expressed Patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.
XX
XX Example 2; Page 72; 718pp; English.
XX
XX The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
XX SQ Sequence 17 BP; 0 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. NO. 5.6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 40 GCAGGAGGACACGACGAG 55
Db 16 GCAGGAGGACACGACGAG 1
RESULT 531
ABV78817/c
ID ABV78817 standard; DNA; 17 BP.
XX
XX AC ABV78817;
XX
XX 03-JAN-2003 (first entry)
XX
XX Human HTPL scanning oligonucleotide SEQ ID 63.
XX
XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
XX human testis expressed Patched like protein; testis; adrenal; liver;
XX male germ cell development; bone marrow; brain; kidney; lung; placenta;
XX prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
XX OS Homo sapiens.
XX
XX PN EP1229046-A2.
XX
XX PD 07-AUG-2002.
XX
XX PF 28-JAN-2002; 2002EP-00001167.
XX
XX PR 30-JAN-2001; 2001WO-US000663.
XX PR 30-JAN-2001; 2001WO-US000664.
XX PR 30-JAN-2001; 2001WO-US000665.
XX PR 30-JAN-2001; 2001WO-US000667.
XX PR 30-JAN-2001; 2001WO-US000668.
XX PR 30-JAN-2001; 2001WO-US000669.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 09-OCT-2001; 2001US-0327898P.
XX
XX PA (AEOM-) AEOMICA INC.
XX
XX FI Zhan J;
XX
XX WPI; 2002-676582/73.
XX
```

DR WPI; 2002-676582/73.  
XX Novel isolated human testis expressed Patched like protein (HTPL), useful  
PT for identifying agonist and antagonist and specific binding partners, and  
PT for treating subjects having defects in HTPL.  
XX Example 2; Page 72; 718pp; English.  
PS  
XX The present invention relates to human testis expressed Patched like  
CC protein (HTPL, see ABV78759 to ASV78762 and AB98519 to AB98520). HTPL  
CC has two isoforms, with a few single base pair differences between the  
CC two. One of the single base pair changes introduces a premature stop  
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL  
CC shares an overall structure organisation with the Patched protein. The  
CC shared structural features strongly imply that HTPL plays a role similar  
CC to that of Patched, and is a potential tumour suppressor. HTPL is  
CC important in regulating male germ cell development, and the HTPL gene was  
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are  
CC useful for diagnosing a disorder caused by mutation in HTPL, and in  
CC therapy and manufacture of a medicament for treatment or prevention of  
CC such disorder associated with decreased expression or activity of human  
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and  
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,  
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are  
CC clinically useful diagnostic markers and potential therapeutic agents for  
CC male infertility and cancer. The present oligonucleotide was used in an  
CC example from the invention  
XX  
SQ Sequence 17 BP; 0 A; 8 C; 3 G; 6 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 5.6e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 40 GCAGGAGGACACGACG 55  
DB 17 GCAGGAGGACACGACG 2  
RESULT 532  
ABK18807  
ID ABK18807 standard; RNA; 17 BP.  
XX  
AC ABK18807;  
XX  
DT 09-APR-2002 (first entry)  
DE Human ERG DNAzyme target sequence Seq ID No 1454.  
XX  
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
KW angiofibroma of tuberosus sclerosus; port-wine stain; wound healing;  
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;  
KW amberzyme.  
OS Homo sapiens.  
PN WO200118124-A2.  
XX  
XX 22-NOV-2001.  
XX  
XX 16-MAY-2001; 2001WO-US015866.  
XX  
XX 16-MAY-2000; 2000US-00572021.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA (GLAXO) GLAXO GROUP LTD.  
XX  
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AV;

XX WPI; 2002-082995/11.  
DR  
XX Novel polynucleotide which down regulates expression of Ets-related gene,  
PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
XX  
PS Claim 4; Page 92; 149pp; English.  
XX  
XX The invention relates to a nucleic acid molecule (I) which down regulates  
CC expression of an Ets-related gene (ERG). (I) is useful for treating  
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
CC tumour angiogenesis, diabetic retinopathy, macular degeneration, verruca  
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, Sturge  
CC vulgaris, angiofibroma of tuberosus sclerosus, port-wine stains, Sturge  
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
CC treating a patient having a condition associated with the level of ERG,  
CC by contacting cells of the patient with (I) under conditions suitable for  
CC the treatment. The method comprises the use of one or more therapies  
CC under conditions suitable for the treatment. Leukaemia or tumour  
CC angiogenesis is treated by administering (I) to the patient in  
CC conjunction with one or more of other therapies such as radiation or  
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and  
CC diseases related to the expression of ERG, and as diagnostic tool to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of ERG RNA in a cell. (I) is useful for specifically  
CC targeting genes that share homology with ERG gene or ERG fusion genes.  
CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
CC related PCR primers of the invention  
XX  
SQ Sequence 17 BP; 6 A; 2 C; 6 G; 0 T; 3 U; 0 Other;  
Query Match 0.8%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 81.2%; Pred. No. 5.6e+02;  
Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
QY 1297 AACGAGGAGTTCACGA 1312  
DB 1 AACGGGGAGUUCACGA 16  
RESULT 533  
ABK17468  
ID ABK17468 standard; RNA; 17 BP.  
XX  
XX ABK17468;  
XX  
DT 09-APR-2002 (first entry)  
DE Human ERG hammerhead ribozyme target sequence, Seq ID No 115.  
XX  
XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
KW angiofibroma of tuberosus sclerosus; port-wine stain; wound healing;  
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;  
KW amberzyme.  
OS Homo sapiens.  
PN WO200118124-A2.  
XX  
XX 22-NOV-2001.  
XX  
XX 16-MAY-2001; 2001WO-US015866.

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XX PR 16-MAY-2000; 2000US-00572021.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (GLAX ) GLAXO GROUP LTD.
XX
XX PI Jarvis T, Von Carlowitz I, Meswigen JA, McLaughlin F, Randi AM;
XX DR WPI; 2002-082995/11.
XX
XX Novel polynucleotide which down regulates expression of Ets-related gene,
XX useful for treating cancer, diabetic retinopathy, macular degeneration,
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
XX Claim 4; Page 61; 149pp; English.
XX
XX The invention relates to a nucleic acid molecule (I) which down regulates
XX expression of an Ets-related gene (ERG). (I) is useful for treating
XX conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
XX tumour angiogenesis, diabetic retinopathy, macular degeneration, verruca
XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
XX vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
XX syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
XX treating a patient having a condition associated with the level of ERG,
XX by contacting cells of the patient with (I) under conditions suitable for
XX the treatment. The method comprises the use of one or more therapies
XX under conditions suitable for the treatment. Leukaemia or tumour
XX angiogenesis is treated by administering (I) to the patient in
XX conjunction with one or more of other therapies such as radiation or
XX chemotherapy treatment. (I) is useful for reducing ERG activity in a
XX cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
XX ERG gene, by contacting (I) with RNA, in the presence of a divalent
XX cation such as Mg2+. (I) is useful for diagnosis of conditions and
XX diseases related to the expression of ERG, and as diagnostic tool to
XX examine genetic drift and mutations within diseased cells or to detect
XX the presence of ERG RNA in a cell. (I) is useful for specifically
XX targeting genes that share homology with ERG gene or ERG fusion genes.
XX ABK17354-ABK22719 represent nucleic acids, including antisense and
XX enzymatic nucleic acid molecules which regulate expression of ERG, and
XX related PCR primers of the invention
XX
XX Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.4; DB 1; Length 17;
XX Best Local Similarity 81.2%; Pred. No. 5.6e+02;
XX Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
XX
XX 704 AGGAGATCAGACTGGA 719
XX |||||:|||||:|||||
XX 2 AGGAGAUCCAGCCUGGA 17
XX
XX RESULT 534
XX ABK18069
XX ID ABK18069 standard; RNA; 17 BP.
XX
XX AC ABK18069;
XX
XX 09-APR-2002 (first entry)
XX
XX Human ERG hammerhead ribozyme target sequence, Seq ID No 716.
XX
XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
XX ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
XX vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
XX tumour angiogenesis; diabetic retinopathy; macular degeneration;
XX neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
XX angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
XX Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
XX Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNzyme; inozyme;
XX amberzyme.
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OS Homo sapiens.
XX WO200188124-A2.
XX
XX PD 22-NOV-2001.
XX
XX PF 16-MAY-2001; 2001WO-US015866.
XX
XX PR 16-MAY-2000; 2000US-00572021.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (GLAX ) GLAXO GROUP LTD.
XX
XX Jarvis T, Von Carlowitz I, Meswigen JA, McLaughlin F, Randi AM;
XX WPI; 2002-082995/11.
XX
XX Novel polynucleotide which down regulates expression of Ets-related gene,
XX useful for treating cancer, diabetic retinopathy, macular degeneration,
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
XX Claim 4; Page 72; 149pp; English.
XX
XX The invention relates to a nucleic acid molecule (I) which down regulates
XX expression of an Ets-related gene (ERG). (I) is useful for treating
XX conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
XX tumour angiogenesis, diabetic retinopathy, macular degeneration, verruca
XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
XX vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
XX syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
XX treating a patient having a condition associated with the level of ERG,
XX by contacting cells of the patient with (I) under conditions suitable for
XX the treatment. The method comprises the use of one or more therapies
XX under conditions suitable for the treatment. Leukaemia or tumour
XX angiogenesis is treated by administering (I) to the patient in
XX conjunction with one or more of other therapies such as radiation or
XX chemotherapy treatment. (I) is useful for reducing ERG activity in a
XX cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
XX ERG gene, by contacting (I) with RNA, in the presence of a divalent
XX cation such as Mg2+. (I) is useful for diagnosis of conditions and
XX diseases related to the expression of ERG, and as diagnostic tool to
XX examine genetic drift and mutations within diseased cells or to detect
XX the presence of ERG RNA in a cell. (I) is useful for specifically
XX targeting genes that share homology with ERG gene or ERG fusion genes.
XX ABK17354-ABK22719 represent nucleic acids, including antisense and
XX enzymatic nucleic acid molecules which regulate expression of ERG, and
XX related PCR primers of the invention
XX
XX Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.4; DB 1; Length 17;
XX Best Local Similarity 81.2%; Pred. No. 5.6e+02;
XX Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
XX
XX 704 AGGAGATCAGACTGGA 719
XX |||||:|||||:|||||
XX 1 AGGAGAUCCAGCCUGGA 16
XX
XX RESULT 535
XX ABK19256
XX ID ABK19256 standard; RNA; 17 BP.
XX
XX AC ABK19256;
XX
XX 09-APR-2002 (first entry)
XX
XX Human ERG hammerhead ribozyme target sequence Seq ID No 1903.
XX
XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
XX ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
XX vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
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PD 01-AUG-2002.  
XX  
XX PF 06-APR-2001; 2001US-00827998.  
XX  
XX PF 26-MAY-2000; 2000US-0207456P.  
XX  
XX PA (GUY/) GU Y.  
XX (SHAN/) SHANNON M E.  
XX  
XX PI Gu Y, Shannon ME;  
XX  
XX WPI; 2002-697817/75.  
XX  
XX PT New isolated nucleic acid encoding an isoform of human pregnancy  
XX associated plasma protein E, for preventing or aborting pregnancy.  
XX  
XX Example 2; Page 146; 353pp; English.  
XX  
XX This invention describes a novel isolated nucleic acid that encodes one  
XX of three new isoforms of human pregnancy associated plasma protein E,  
XX hPAPP-E. The products of the invention have abortive and contraceptive  
XX activity and can be used for gene therapy or in a vaccine. The nucleic  
XX acid, polypeptide encoded by it, or antibody to the polypeptide can be  
XX used in pharmaceutical compositions or vaccines for preventing or  
XX aborting pregnancy. PAPP-E is used in the antenatal diagnosis of  
XX dysgenetic pregnancies. The nucleic acids are used as probes to assess  
XX the level of PAPP-E isoform mRNA in chorionic villus samples, and the  
XX CC antibodies can be used to assess the expression levels of PAPP-E isoform  
XX proteins in chorionic villus samples, to diagnose dysgenetic pregnancies  
XX antenatally. This sequence represents an oligomer used in scanning the  
XX human PAPP-E genes described in the disclosure of the invention  
XX  
XX Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 5.6e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 288 ACTTCGTTCTGCACGG 303  
DB 1 ACTTCGTTCTGCACGG 16  
RESULT 538  
ABK57239  
ID ABK57239 standard; RNA; 17 BP.  
XX  
XX AC ABK57239;  
XX  
XX DT 02-JUL-2002 (first entry)  
XX  
XX DE Human CLCA1 gene enzymatic nucleic acid #1610.  
XX  
XX KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
XX antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
XX chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
XX oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
XX acetylcysteine.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO200211674-A2.  
XX  
XX PD 14-FEB-2002.  
XX  
XX PF 09-AUG-2001; 2001WO-US024970.  
XX  
XX PR 09-AUG-2000; 2000US-0224383P.  
XX  
XX PA (RIBO-) RIBOZYME PHARM INC.  
XX (SYNT) SYNTAX USA LLC.  
XX (THOM) THOMPSON J.  
XX

PI Thompson J, Mcswiggen J, Mckenzie T, Ayers D, Szymkowski DE;  
PI Grupe A;  
XX  
XX WPI; 2002-217145/27.  
XX  
XX Enzymatic polynucleotide that down regulates expression of chloride  
XX channel calcium activated gene, useful for treating Chronic obstructive  
XX pulmonary disease (COPD), chronic bronchitis and asthma.  
XX  
XX Claim 4; Page 100; 152pp; English.  
XX  
XX The invention relates to enzymatic nucleic acid molecules that down  
XX regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
XX by cleaving RNA derived from the genes. The nucleic acid sequences are  
XX useful as pharmaceutical agents for treating conditions such as chronic  
XX obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
XX fibrosis, obstructive bowel syndrome and any other diseases or conditions  
XX that are related to or will respond to the levels of CLCA1 in a cell or  
XX tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
XX hence, are useful for treatment of a patient having a condition  
XX associated with the level of CLCA1, where the invention further comprises  
XX the use of one or more therapies under conditions suitable for the  
XX treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
XX antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
XX nucleic acids of the invention are also used as diagnostic tools to  
XX examine genetic drift and mutations within diseased cells or to detect  
XX the presence of CLCA1 RNA in a cell. This sequence represents an  
XX enzymatic nucleic acid molecule of the invention  
XX  
XX Sequence 17 BP; 5 A; 4 C; 4 G; 0 T; 4 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 5.6e+02;  
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;  
QY 146 AACGCGAGCTGTCAT 161  
DB 2 AACGCGAGCTGTCAT 17  
RESULT 539  
ABK57624  
ID ABK57624 standard; RNA; 17 BP.  
XX  
XX AC ABK57624;  
XX  
XX DT 02-JUL-2002 (first entry)  
XX  
XX DE Human CLCA1 gene enzymatic nucleic acid #1995.  
XX  
XX KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
XX antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
XX chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
XX oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
XX acetylcysteine.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO200211674-A2.  
XX  
XX PD 14-FEB-2002.  
XX  
XX PF 09-AUG-2001; 2001WO-US024970.  
XX  
XX PR 09-AUG-2000; 2000US-0224383P.  
XX  
XX PA (RIBO-) RIBOZYME PHARM INC.  
XX (SYNT) SYNTAX USA LLC.  
XX (THOM) THOMPSON J.  
XX  
XX PI Thompson J, Mcswiggen J, Mckenzie T, Ayers D, Szymkowski DE;  
XX Grupe A;  
XX

DR WPI; 2002-217145/27.  
XX Enzymatic polynucleotide that down regulates expression of chloride  
PT channel calcium activated gene, useful for treating Chronic obstructive  
PT pulmonary disease (COPD), chronic bronchitis and asthma.  
XX  
XX Claim 4; Page 131; 152pp; English.  
XX  
CC The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic  
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
CC that are related to or will respond to the levels of CLCA1 in a cell or  
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCA1, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCA1 RNA in a cell. This sequence represents an  
CC enzymatic nucleic acid molecule of the invention  
XX  
SQ Sequence 17 BP; 5 A; 5 C; 4 G; 0 T; 3 U; 0 Other;  
Query Match 0.8%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 5.6e+02;  
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;  
QY 1573 TCAGGCAGGCCAGCTT 1588  
DQ :|||:|||||:|:  
DB 2 UCAAGCAGGCCAGGUU 17  
RESULT 540  
ABK56596  
ID ABK56596 standard; RNA; 17 BP.  
AC ABK56596;  
XX  
XX 02-JUL-2002 (first entry)  
XX Human CLCA1 gene enzymatic nucleic acid #967.  
DE Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
KW acetylcysteine.  
XX  
XX Homo sapiens.  
XX WO200211674-A2.  
XX  
XX 14-FEB-2002.  
XX  
XX 09-AUG-2001; 2001WO-US024970.  
XX  
XX 09-AUG-2000; 2000US-0224383P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX (SYNT ) SYNTAX USA LLC.  
XX (THOM/) THOMPSON J.  
XX Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;  
XX Grupe A;  
XX WPI; 2002-217145/27.  
XX Enzymatic polynucleotide that down regulates expression of chloride

PT channel calcium activated gene, useful for treating Chronic obstructive  
PT pulmonary disease (COPD), chronic bronchitis and asthma.  
XX Claim 4; Page 75; 152pp; English.  
XX  
CC The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic  
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
CC that are related to or will respond to the levels of CLCA1 in a cell or  
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCA1, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCA1 RNA in a cell. This sequence represents an  
CC enzymatic nucleic acid molecule of the invention  
XX  
SQ Sequence 17 BP; 8 A; 6 C; 2 G; 0 T; 1 U; 0 Other;  
Query Match 0.8%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 5.6e+02;  
Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
QY 572 AACCAAGCTCAGAC 687  
DQ :|||:|||||:|:  
DB 1 AAGCAAGCUCACAAAC 16  
RESULT 541  
ABK57560  
ID ABK57560 standard; RNA; 17 BP.  
AC ABK57560;  
XX  
XX 02-JUL-2002 (first entry)  
XX Human CLCA1 gene enzymatic nucleic acid #1931.  
DE Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
KW acetylcysteine.  
XX  
XX Homo sapiens.  
XX WO200211674-A2.  
XX  
XX 14-FEB-2002.  
XX  
XX 09-AUG-2001; 2001WO-US024970.  
XX  
XX 09-AUG-2000; 2000US-0224383P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX (SYNT ) SYNTAX USA LLC.  
XX (THOM/) THOMPSON J.  
XX Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;  
XX Grupe A;  
XX WPI; 2002-217145/27.  
XX Enzymatic polynucleotide that down regulates expression of chloride  
PT channel calcium activated gene, useful for treating Chronic obstructive  
PT pulmonary disease (COPD), chronic bronchitis and asthma.  
XX

PS Claim 4; Page 129; 152pp; English.

XX The invention relates to enzymatic nucleic acid molecules that down

CC regulate expression of chloride channel activated 1 (CLCA1) genes

CC by cleaving RNA derived from the genes. The nucleic acid sequences are

CC useful as pharmaceutical agents for treating conditions such as chronic

CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic

CC fibrosis, obstructive bowel syndrome and any other diseases or conditions

CC that are related to or will respond to the levels of CLCA1 in a cell or

CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,

CC hence, are useful for treatment of a patient having a condition

CC associated with the level of CLCA1, where the invention further comprises

CC the use of one or more therapies under conditions suitable for the

CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,

CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The

CC nucleic acids of the invention are also used as diagnostic tools to

CC examine genetic drift and mutations within diseased cells or to detect

CC the presence of CLCA1 RNA in a cell. This sequence represents an

CC enzymatic nucleic acid molecule of the invention

XX

SQ Sequence 17 BP; 8 A; 4 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 5.6e+02;

Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Oy 604 AAACCTGGAGACCTACA 619

Db 1 AAACUUGAGACCUACA 16

RESULT 542

ABT34610

ID ABT34610 standard; DNA; 17 BP.

XX AC

XX ABT34610;

DT 12-JUN-2003 (first entry)

XX

DE Tumour suppression related human fukutin oligo SEQ ID No 247.

XX

XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;

XX antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;

XX schizophrenia; protein chip; gene therapy; tumour suppression;

XX human fukutin; ds.

XX

OS Homo sapiens.

XX

XX WO2003025175-A2.

XX

XX 27-MAR-2003.

XX

XX 17-SEP-2002; 2002WO-IB004208.

XX

XX 17-SEP-2001; 2001FR-00011978.

XX

XX (MOLE-) MOLECULAR ENGINES LAB.

XX

XX Telerman A, Amson R, Tuijnder M;

XX

XX WPI; 2003-313353/30.

XX

XX New isolated nucleic acid, useful for treating viral diseases associated

XX with tumors and cell degeneration, also related polypeptides, antibodies

XX and transfected cells.

XX

XX Disclosure; Page 63; 720pp; French.

XX

XX The invention relates to a novel isolated 17 mer nucleic acid sequence,

XX given in the specification, a sequence containing at least 15 consecutive

XX nucleotides from the 17 mer sequence, a sequence with, after optimal

XX alignment, at least 80 % identity to the 17 mer sequence, a sequence that

XX hybridizes to them under highly stringent conditions, or the complement

CC of any of them, or the corresponding RNA. The novel isolated nucleic

CC acids of the invention are useful as probes and primers for detecting,

CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one

CC component of a gene chip, in vitro as (anti)sense reagents, and for

CC production of recombinant polypeptides. Any of the nucleic acids,

CC polypeptides, vectors containing the nucleic acids, cells containing the

CC vector or antibodies directed against the polypeptides are useful for

CC preparation of pharmaceuticals for prevention and/or treatment of viral

CC diseases that are characterised by development of tumours or cell

CC degeneration, specifically cancer but also Alzheimer's disease and

CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in

CC patient samples is useful for diagnosis and/or prognosis of these

CC diseases. The polypeptides can also be used to generate antibodies, and

CC both the polypeptide and antibodies are useful as components of protein

CC chips. The nucleic acid sequences of the invention can be used in gene

CC therapy. This polynucleotide sequence represents a tumour suppression

XX related human fukutin oligonucleotide of the invention

XX

SQ Sequence 17 BP; 5 A; 2 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;

Best Local Similarity 93.8%; Pred. No. 5.6e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 1174 ATCTTCTATGAGATGG 1189

Db 2 ATCTTCTATGAGATGG 17

RESULT 543

ABZ64792

ID ABZ64792 standard; RNA; 17 BP.

XX AC

XX ABZ64792;

XX

DT 21-MAR-2003 (first entry)

XX

DE Human HER2 DNAzyme substrate #249.

XX

XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;

XX enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;

XX anti-rheumatic; cancer; AIDS; ss.

XX

OS Homo sapiens.

XX

XX WO200297114-A2.

XX

XX 05-DEC-2002.

XX

XX 29-MAY-2002; 2002WO-US016840.

XX

XX 29-MAY-2001; 2001US-0294140P.

XX

XX 06-JUN-2001; 2001US-0296249P.

XX

XX 10-SEP-2001; 2001US-0318471P.

XX

XX (RIBO-) RIBOZYME PHARM INC.

XX

XX Mcswiggen J;

XX

XX WPI; 2003-140484/13.

XX

XX Novel short interfering RNA and enzymatic nucleic acid useful for

XX treating cancer, modulates the expression of a nucleic acid encoding

XX HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

XX

XX Claim 4; Page 137; 185pp; English.

XX

XX The invention relates to a novel short interfering RNA (siRNA) nucleic

XX acid molecule or an enzymatic nucleic acid molecule, that modulates

XX expression of a nucleic acid molecule encoding HER2, K-Ras, N-Ras,

XX human immunodeficiency virus (HIV) or a component of HIV. The nucleic

XX acid molecule of the invention has cytostatic, anti-HIV, and anti-

XX rheumatic activity. The nucleic acid molecules are useful for reducing

```
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
XX
SQ Sequence 17 BP; 2 A; 6 C; 5 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 5.6e+02;
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 49 CCAGCAGTGTGACTGC 64
DB 1 CCAGCUGUGACUGC 16

RESULT 544
ABZ60189/c
ID ABZ60189 standard; RNA; 17 BP.
XX
XX AC ABZ60189;
XX
XX 21-MAR-2003 (first entry)
XX
XX Human K-Ras DNazyme substrate #301.
XX
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosolic; anti-HIV;
XX anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
XX
XX WO200297114-A2.
XX
XX 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
XX
XX 06-JUN-2001; 2001US-0296249P.
XX
XX 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J;
XX
XX WPI; 2003-140484/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
XX treating cancer, modulates the expression of a nucleic acid encoding
XX HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 58; Page 90; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
XX acid molecule or an enzymatic nucleic acid molecule, that modulates
XX expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX acid molecule of the invention has cytosolic, anti-HIV, and anti-
XX rheumatic activity. The nucleic acid molecules are useful for reducing
XX HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX also useful for treating breast, ovarian, colorectal, lung, prostate,
XX bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
XX ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX ribozymes of the invention
XX
XX Sequence 17 BP; 2 A; 8 C; 2 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 5.6e+02;
```

```
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 361 GGGAGAGTGACACAGG 376
DB 17 GGGAGAGTGACCATG 2

RESULT 545
ACC74114
ID ACC74114 standard; DNA; 17 BP.
XX
XX ACC74114;
XX
XX 11-JUL-2003 (first entry)
XX
XX Human CYP2D6 targeting oligo SEQ ID NO: 184.
XX
XX Human; cultured cell; coisogenic; genotypically distinct; target locus;
XX ABCB1 (MDR1); targeting oligonucleotide; CYP2D6; ss.
XX
XX Homo sapiens.
XX
XX WO2003027264-A2.
XX
XX 03-APR-2003.
XX
XX 27-SEP-2002; 2002WO-US031180.
XX
XX 27-SEP-2001; 2001US-0325992P.
XX
XX (UYDE ) UNIV DELAWARE.
XX
XX Kmiec EB, Rice MC;
XX
XX WPI; 2003-371919/35.
XX
XX Novel cultured cell collection comprising at least 5 genotypically
XX distinct cells each of which is coisogenic with respect to other cells at
XX target locus common among them, useful for identifying target locus
XX genotypes.
XX
XX Example 2; Page 102; 112pp; English.
XX
XX The invention relates to a novel collection of cultured cells, comprising
XX at least 5 genotypically distinct cells, where each of the at least 5
XX genotypically distinct cells is coisogenic with respect to the others of
XX the at least 5 genotypically distinct cells at a target locus common
XX among them, and where each of the at least 5 genotypically distinct cells
XX can be separately assayed. The collection of cells is useful for
XX identifying genotypes of a target locus that alter a cellular phenotype.
XX The collection is also useful for pharmacogenomic studies, and in studies
XX of structure-activity relationships of existing, and of potential new,
XX therapeutic agents permitting multiplex analysis of the effects of amino
XX acid changes on ligand-receptor interactions. The sequences shown in
XX ACC79391-ACC73974 represent human ABCB1 (MDR1) targeting oligos. The
XX sequences shown in ACC73975-ACC74126 represent human CYP2D6 targeting
XX oligos
XX
XX Sequence 17 BP; 3 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 5.6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 745 GCATCCCGGAAGTGT 760
DB 2 GCATCCCGGAAGTGT 17

RESULT 546
ACC74113/c
ID ACC74113 standard; DNA; 17 BP.
XX
```

|                       |  |
|-----------------------|--|
| AC                    | ACC74113;  |
| AD                    |  |
| DT                    | 11-JUL-2003 (first entry)  |
| XX                    |  |
| DE                    | Human CYP2D6 targeting oligo SEQ ID NO: 183.   |
| XX                    |  |
| KW                    | Human; cultured cell; coisogenic; genotypically distinct; target locus;<br>ABCB1 (MDR1); targeting oligonucleotide; CYP2D6; ss.  |
| XX                    |  |
| OS                    | Homo sapiens.  |
| PN                    | WO2003027264-A2.   |
| XX                    |  |
| PD                    | 03-APR-2003.   |
| XX                    |  |
| PX                    | 27-SEP-2002; 2002WO-US031180.  |
| XX                    |  |
| PR                    | 27-SEP-2001; 2001US-0325992P.  |
| XX                    |  |
| PA                    | (UYDE ) UNIV DELAWARE.   |
| XX                    |  |
| PI                    | Kniec EB, Rice MC;   |
| DR                    | WPI; 2003-371919/35.   |
| XX                    |  |
| PT                    | Novel cultured cell collection comprising at least 5 genotypically<br>distinct cells each of which is coisogenic with respect to other calls at<br>target locus common among them, useful for identifying target locus<br>genotypes.   |
| PS                    | Example 2; Page 102; 112pp; English.   |
| CC                    | The invention relates to a novel collection of cultured cells, comprising<br>at least 5 genotypically distinct cells, where each of the at least 5<br>genotypically distinct cells is coisogenic with respect to the others of<br>the at least 5 genotypically distinct cells at a target locus common<br>among them, and where each of the at least 5 genotypically distinct cells<br>can be separately assayed. The collection of cells is useful for<br>identifying genotypes of a target locus that alter a cellular phenotype.<br>The collection is also useful for pharmacogenomic studies, and in studies<br>of structure-activity relationships of existing, and of potential new,<br>therapeutic agents permitting multiplex analysis of the effects of amino<br>acid changes on ligand-receptor interactions. The sequences shown in<br>ACC79391-ACC7974 represent human ABCB1 (MDR1) targeting oligos. The<br>sequences shown in ACC73975-ACC74126 represent human CYP2D6 targeting<br>oligos |
| XX                    |  |
| SQ                    | Sequence 17 BP; 3 A; 8 C; 3 G; 3 T; 0 U; 0 Other;  |
|                       |  |
| Query Match           | 0.8%; Score 14.4; DB 1; Length 17;   |
| Best Local Similarity | 93.8%; Pred. No. 5.6e+02;  |
| Matches               | 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  |
|                       |  |
| QY                    | 745 GCCATCCGGGAAGTGT 760   |
| DB                    |  |
|                       | 16 GGCAATCCGGGAAGTGT 1   |
|                       |  |
| RESULT 547            |  |
| AAV05962/c            |  |
| ID                    | AAV05962 standard; DNA; 18 BP.   |
| XX                    |  |
| AC                    | AAV05962;  |
| XX                    |  |
| DT                    | 05-JUN-1998 (first entry)  |
| XX                    |  |
| DE                    | Oligonucleotide for genetic fingerprinting.  |
| XX                    |  |
| KW                    | Biotinylated-oligonucleotide; genetic fingerprinting; hybridisation;   |
| KW                    | molecular biology; forensic medicine; criminology; ss.   |
| XX                    |  |
| OS                    | Synthetic.   |
| XX                    |  |

| Key        | modified_base   | Location/Qualifiers   |
|------------|---|-----------------------|
| FH         | 1   |                       |
| FT         | 1   | /*tag= a              |
| FT         | 2   | /note= "Biotinylated" |
| FT         | 2. .3   |                       |
| FT         | /*tag= b  |                       |
| FT         | /*note= "repeated 2-8 times"  |                       |
| FT         | 3   |                       |
| FT         | /*tag= c  |                       |
| FT         | /*note= "Biotinylated"  |                       |
| XX         |   |                       |
| PN         | RU2081919-C1.   |                       |
| XX         |   |                       |
| XX         | 20-JUN-1997.  |                       |
| PD         |   |                       |
| XX         |   |                       |
| PF         | 17-MAR-1992;  | 92SU-05056570.        |
| XX         |   |                       |
| PR         | 17-MAR-1992;  | 92SU-05056570.        |
| XX         |   |                       |
| PA         | (VEKT=) VEKTOR RES PRODN ASSOC.   |                       |
| XX         |   |                       |
| PI         | Korokhov NP, Karpyshev NN, Oreshkova SF;                                  |                       |
| XX         |   |                       |
| DR         | WPI; 1998-085156/08.  |                       |
| XX         |   |                       |
| XX         |   |                       |
| PT         | Collection for genome finger-printing - by using specified sequence as    |                       |
| PT         | the oligo:nucleic probe.  |                       |
| XX         |   |                       |
| ES         | Claim 1; Col 7; 5pp; Russian.   |                       |
| XX         |   |                       |
| CC         | This sequence represents a biotinylated-oligonucleotide containing a      |                       |
| CC         | simple repeat sequence (CAC) which can be used for genetic fingerprinting |                       |
| CC         | by blot-hybridisation of a DNA specimen. The oligonucleotide is useful in |                       |
| CC         | molecular biology, forensic medicine, criminology, e.g. for establishing  |                       |
| CC         | blood relationship in family analysis                                     |                       |
| XX         |   |                       |
| SQ         | Sequence 18 BP; 5 A; 12 C; 0 G; 1 T; 0 U; 0 Other;                        |                       |
|            | Query Match 0.8%; Score 14.4; DB 1; Length 18;                            |                       |
|            | Best Local Similarity 93.8%; Pred. No. 6e+02;                             |                       |
|            | Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;               |                       |
| QY         | 230 GTGGTGTGGTGTGGCGG 245   |                       |
|            |   |                       |
| Db         | 18 GTGGTGTGGTGTGG 3   |                       |
|            |   |                       |
|            |   |                       |
| RESULT 548 |   |                       |
| AAZ41020/C |   |                       |
| ID         | AAZ41020 standard; DNA; 18 BP.  |                       |
| XX         |   |                       |
| AC         | AAZ41020;   |                       |
| XX         |   |                       |
| DT         | 26-JAN-2000 (first entry)   |                       |
| XX         |   |                       |
| DE         | Cellular inhibitor of apoptosis-2 phosphorothioate antisense oligo #12.   |                       |
| XX         |   |                       |
| KW         | Identification; genetic target; gene modulation; human; probe;            |                       |
| KW         | antisense oligonucleotide; phosphorothioate; PCR primer;                  |                       |
| KW         | nucleotide sequence-based technology; antisense drug discovery;           |                       |
| KW         | target validation; ss.  |                       |
| XX         |   |                       |
| OS         | Synthetic.  |                       |
| OS         | Homo sapiens.   |                       |
| XX         |   |                       |
| PN         | WO9953101-A1.   |                       |
| XX         |   |                       |
| PD         | 21-OCT-1999.  |                       |
| XX         |   |                       |
| PF         | 13-APR-1999;  | 99WO-US008268.        |
| XX         |   |                       |
| XX         | 13-APR-1998;  | 98US-0081483P.        |
| PR         | 28-APR-1998;  | 98US-0006763B.        |

XX (ISIS-) ISIS PHARM INC.  
XX  
XX Cowsett LM, Baker BF, Mcneil J, Freier SM, Sasmor HM, Brooks DG;  
XX PI Chasi C, Wyatt JR, Borchers AH, Vickers TA,  
XX WP1; 1999-620446/53.  
XX  
XX Identifying compounds which modulate expression of nucleic acids, used to  
XX PT provide compounds having defined physical, chemical or bioactive  
XX PT properties, e.g. antisense activity.  
XX  
XX Example 21; Page 100; 264pp; English.  
XX  
XX A method has been developed of defining a set of compounds that modulate  
XX CC the expression of a target nucleic acid (tNA) sequence via binding of a  
XX CC compounds with the tNA sequence. The method comprises generating a  
XX CC library of virtual compounds in silico according to defined criteria, and  
XX CC evaluating in silico the binding of the virtual compounds with the tNA  
XX CC according to defined criteria. Also described are: (1) a method of  
XX CC defining a set of oligonucleotides (ONS) that modulate the expression of  
XX CC a tNA sequence via binding of the ONS with the tNA sequence comprising  
XX CC generating a library of virtual compounds in silico according to defined  
XX CC criteria, and evaluating in silico the binding of the virtual ONS with  
XX CC the tNA according to defined criteria; and (2) a method of defining a set  
XX CC of compounds that modulate the expression of a tNA sequence via binding  
XX CC of the compounds with the tNA. The methods can be used for the generation  
XX CC and identification of synthetic compounds having defined physical,  
XX CC chemical or bioactive properties. Information gathered from assays of  
XX CC such compounds is used to identify nucleic acid sequences that are  
XX CC tractable to a variety of nucleotide sequence-based technologies, e.g.  
XX CC antisense drug discovery and target validation. AAZ40852 to AAZ41220, and  
XX CC AAY52701 to AAY52706, represent sequences used in the exemplification of  
XX CC the present invention  
XX  
XX Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.4; DB 1; Length 18;  
Best Local Similarity 93.8%; Pred. No. 6e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 513 CCTGGAGAGCTGACC 528  
DB 16 CTTGGAGAGTGTACC 1  
RESULT 549  
AAZ221114/C  
ID AAZ22114 standard; DNA; 18 BP.  
XX AC AAZ22114;  
XX DT 26-NOV-1999 (first entry)  
XX DE Human c-IAP-2 mRNA inhibiting antisense oligo ISIS #23423.  
XX KW Cellular Inhibitor of Apoptosis-2; antisense; diagnostic; therapeutic;  
XX KW c-IAP-2; prophylaxis; infection; inflammation; tumor formation; ss.  
XX OS Synthetic.  
XX OS Homo sapiens.  
XX US5958771-A.  
XX PN 28-SEP-1999.  
XX PD 03-DEC-1998; 98US-00205144.  
XX PF 03-DEC-1998; 98US-00205144.  
XX PR (ISIS-) ISIS PHARM INC.  
XX PA Bennett CF, Cowsett LM, Ackermann EJ;  
XX

XX WPI; 1999-561046/47.  
XX  
XX Antisense compounds complementary to Cellular Inhibitor of Apoptosis-2  
PT useful for e.g. diagnostics, therapeutics, and as research reagents.  
PT  
XX Claim 3; Col 39; 33pp; English.  
XX  
XX The invention provides antisense compounds of 8-30 nucleotides that  
CC inhibit the expression of human Cellular Inhibitor of Apoptosis-2 (c-IAP-  
CC 2). The antisense compounds may be used for diagnostics, therapeutics  
CC (for modulating the expression of c-IAP-2), prophylaxis (e.g. to prevent  
CC or delay infection, inflammation, or tumor formation), as research  
CC reagents (e.g. to distinguish between members of a biological pathway)  
CC and in kits. Sequences AA222103-142 represent phosphorothioate  
CC oligonucleotides used for antisense inhibition of cellular inhibitor of  
CC apoptosis-2  
XX  
XX Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
SQ  
XX  
XX Query Match 0.8%; Score 14.4; DB 1; Length 18;  
XX Best Local Similarity 93.8%; Pred. No. 6e+02;  
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
XX  
XX QY 513 CTTGGAGAGCTGACC 528  
XX |||||  
XX 16 CTTGGAGAGTGTGACC 1  
XX  
XX  
XX RESULT 550  
XX AAZ70710/C  
XX ID AAZ70710 standard; DNA; 18 BP.  
XX  
XX AC AAZ70710;  
XX  
XX DT 10-SEP-2001 (first entry)  
XX  
XX DE Human biallelic marker upstream amplification primer SEQ ID NO:5066.  
XX  
XX KW Human genome; biallelic marker; high density disequilibrium map;  
XX genomic map; haplotype, phenotype; polymorphic base; genotyping;  
XX haplotyping; hybridisation; identification; characterisation;  
XX amplification; single nucleotide polymorphism; SNP; PCR primer;  
XX diagnosis; ss.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO9954500-A2.  
XX  
XX PD 28-OCT-1999.  
XX  
XX PF 21-APR-1999; 99WO-IB000822.  
XX  
XX PR 21-APR-1998; 98US-0082614P.  
XX PR 23-NOV-1998; 98US-0109732P.  
XX  
XX PA (GEST ) GENSET.  
XX  
XX PI Cohen D, Blumenfeld M, Chumakov I;  
XX  
XX PPI; 2000-013267/01.  
XX  
XX PR Novel biallelic markers used to construct a high density disequilibrium  
XX map of the human genome.  
XX  
XX PS Claim 8; Page 1311; 2745pp; English.  
XX  
XX AAZ5654 to AAZ69578 represent human biallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses; they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies

CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence listing from the  
CC present invention

XX Sequence 18 BP; 5 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;  
Best Local Similarity 93.8%; Pred. No. 6e+02; 1; Indels 0; Gaps 0;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 871 TACCTGGATGACGTGTG 886

Db 17 TACCTGGATGACGTGTG 2

RESULT 551

AAD20371

ID AAD20371 standard; DNA; 18 BP.

XX AAD20371;

DT 03-JAN-2002 (first entry)

DE Antisense oligo, ISIS# 29895, targeted to human SRC-1 DNA.

XX Human; antisense; steroid receptor coactivator-1; SRC-1; P-SRC-1; NcoA-1;  
KW diagnostic; therapeutic; prophylaxis; infection; inflammation;  
KW cytosolic; tumour formation; antiinflammatory; antibacterial;  
KW phosphorothioate; ss.

XX Homo sapiens.

OS Synthetic.

FH Key Location/Qualifiers

FT modified\_base 1..20

FT /tag= a

FT /mod\_base= OTHER

FT /note= "Phosphorothioate backbone"

FT modified\_base 1..4

FT /tag= b

FT /mod\_base= OTHER

FT /note= "2'-methoxyethyl residues"

FT modified\_base 2

FT /tag= c

FT /mod\_base= m5c

FT modified\_base 3

FT /tag= d

FT /mod\_base= m5c

FT modified\_base 7

FT /tag= e

FT /mod\_base= m5c

FT modified\_base 13

FT /tag= f

FT /mod\_base= m5c

FT modified\_base 15..18

FT /tag= h

FT /mod\_base= OTHER

FT /note= "2'-methoxyethyl residues"

FT modified\_base 15

FT /tag= g

FT /mod\_base= m5c

XX US6294382-B1.

PN 25-SEP-2001.

XX 27-NOV-2000; 2000US-00723534.

PF

XX 27-NOV-2000; 2000US-00723534.

PR (ISIS-) ISIS PHARM INC.

PA Bennett CF, Cowsett LM;

PI WPI; 2001-638016/73.

XX New antisense oligonucleotides for inhibiting the expression of human

XX steroid receptor coactivator-1, particularly useful for preventing,  
XX delaying or treating infection, inflammation or tumor formation.  
XX Claim 3; Col 43; 36pp; English.

XX The present invention relates to an antisense compound of up to 30

XX nucleobases in length, which specifically hybridises with and inhibits  
XX the expression of human steroid receptor coactivator-1 (SRC-1) (also  
XX known as P-SRC-1 and NcoA-1) gene. The antisense compounds are useful for  
XX diagnostics, therapeutics, prophylaxis, or as research reagents or kits.

XX The antisense oligonucleotides are useful for treating an animal,  
XX particularly a human, suspected of having or being prone to a disease or  
XX condition associated with the expression of SRC-1. In particular, the  
XX antisense oligonucleotides are useful for preventing, delaying or  
XX treating infection, inflammation or tumour formation. The present  
XX sequence is an antisense oligonucleotide, ISIS# 29895, targeted to human  
XX SRC-1 DNA

XX Sequence 18 BP; 6 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 6e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 152 AGCTGTCATGACACT 167

Db 1 AGCTGTCATGACACT 16

RESULT 552

ABQ65383/c

ID ABQ65383 standard; DNA; 18 BP.

XX ABQ65383;

AC 20-AUG-2002 (first entry)

XX Human gene methylation status determination method PCR primer #123.

DE Toxicological diagnosis; DNA methylation; methylation status;

XX Toxic response; human; PCR; primer; ss.

XX Homo sapiens.

XX WO200240710-A2.

XX 23-MAY-2002.

XX 08-NOV-2001; 2001WO-EP012951.

XX 14-NOV-2000; 2000DE-01056802.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2002-463571/49.

XX Toxicological diagnosis, useful for diagnosis and prognosis of adverse

XX reactions, based on effect of test compounds on methylation status of

XX selected genes, involves determining changes in DNA methylation status.

XX Example 2; Page 104; 113pp; German.

PS

XX The present invention relates to a method of toxicological diagnosis,  
 CC involving taking a DNA-containing sample from an organism or cell culture  
 CC that has been treated with a test compound and determining any changes in  
 CC the DNA methylation status or pattern caused by said test compound. The  
 CC method is used for diagnosis and prognosis of adverse toxic responses in  
 CC individuals. The present sequence is a PCR primer used to demonstrate the  
 CC method of the invention  
 CC  
 XX Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 14.4; DB 1; Length 18;  
 Best Local Similarity 93.8%; Pred. No. 6e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 774 CCTCAAAACGCCCAAC 789  
 DB 16 CCTCAAAACGCCCAAC 1  
 RESULT 553  
 ABK34171/C  
 ID ABK34171 standard; DNA; 18 BP.  
 XX  
 AC ABK34171;  
 XX  
 DT 18-JUN-2002 (first entry)  
 XX  
 DE Human UNG PCR primer #1.  
 XX  
 KW Human; ss; astrocytoma; cytostatic; staging; cysteine methylation; CpG;  
 KW bisulphite; brain tissue; MALDI; ESI; electron spray mass spectrometry;  
 KW matrix assisted laser desorption/ionization mass spectrometry; primer;  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200202808-A2.  
 XX  
 PD 10-JAN-2002.  
 XX  
 PF 02-JUL-2001; 2001WO-EP007538.  
 XX  
 PR 30-JUN-2000; 2000DE-01032529.  
 PR 01-SEP-2000; 2000DE-01043826.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2002-171649/22.  
 XX  
 PT Novel chemically modified genomic DNA sequences, useful in the  
 PT characterization, classification, differentiation, grading, staging,  
 PT treatment and/or diagnosis of astrocytomas or predisposition to  
 PT astrocytomas.  
 XX  
 PS Example; Page 26; 37pp; English.  
 XX  
 CC The invention relates to a nucleic acid comprising a sequence (I) of at  
 CC least 18 bases in length of a segment of chemically pre-treated genomic  
 CC DNA which has any one of the sequences of (ABK3919-ABK4032) or its  
 CC complement. Also included are an oligonucleotide or peptide nucleic acid  
 CC (or set thereof) of at least 9 nucleotides which hybridises to (I),  
 CC primers for (I), probes for detecting cytosine methylation or single-  
 CC nucleotide polymorphisms (SNP) in (I), an array of oligomers or peptide  
 CC nucleic acids for analysing diseases associated with the methylation  
 CC states of the CpG dinucleotides of (I). The array is useful for  
 CC determining genetic and/or epigenetic parameters, classification,  
 CC differentiation, grading, staging, treatment and/or diagnosis of  
 CC astrocytomas, or the predisposition to astrocytomas by analysing cytosine  
 CC methylations, involves obtaining a biological sample containing genomic  
 CC DNA, extracting the genomic DNA, converting cytosine bases which are  
 CC un methylated at the 5-position, in the genomic DNA sample, to uracil or

CC another base which is dissimilar to cytosine in terms of hybridisation  
 CC behaviour, by chemical treatment and amplifying chemically pre-treated  
 CC genomic DNA fragments using the array and a polymerase, where the  
 CC amplificates carry a detectable label. The method further involves  
 CC identifying methylation status of the cytosine positions by reference to  
 CC analysing methylation status of the cytosine positions by reference to  
 CC one or more data sets. The genomic DNA is chemically treated by using a  
 CC bisulphite, hydrogen sulphite or disulphite. The amplification step  
 CC amplifies DNA which is of particular interest in astrocytoma or brain  
 CC tissue, based on the specific genomic methylation status of brain  
 CC tissues, as opposed to background DNA. The amplificates carry a  
 CC fluorescent label or radionuclide. Optionally, the labels of the  
 CC amplificates are detachable molecule fragments having a typical mass  
 CC which are detected in a mass spectrometer. The fragments of chemically  
 CC pre-treated genomic DNA to be amplified, have a single positive or  
 CC negative charge for a better detectability in the mass spectrometer.  
 CC Preferably, the amplificates or fragments of the amplificates are  
 CC detected by matrix assisted laser desorption/ionization mass spectrometry  
 CC (MALDI) or using electron spray mass spectrometry (ESI). The present  
 CC sequence is a PCR primer used to amplify a region containing a methylated  
 CC cytosine from one of the chemically pre-treated reference DNA samples of  
 CC the invention. Note: The sequence data for this patent did not form part  
 CC of the printed specification, but was obtained in electronic format  
 CC directly from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.4; DB 1; Length 18;  
 Best Local Similarity 93.8%; Pred. No. 6e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 774 CCTCAAAACGCCCAAC 789  
 DB 16 CCTCAAAACGCCCAAC 1  
 RESULT 554  
 ABK28109/C  
 ID ABK28109 standard; DNA; 18 BP.  
 XX  
 AC ABK28109;  
 XX  
 DT 09-APR-2002 (first entry)  
 XX  
 DE Human UNG methylation state PCR primer #1.  
 XX  
 KW Human; ss; astrocytoma; oligastrocytoma; oligodendroglioma; antitumour;  
 KW cytostatic; cytosine methylation state; single nucleotide polymorphism;  
 KW SNP; CpG; brain tumour; PCR; primer.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200200705-A2.  
 XX  
 PD 03-JAN-2002.  
 XX  
 PF 02-JUL-2001; 2001WO-EP007539.  
 XX  
 PR 30-JUN-2000; 2000DE-01032529.  
 PR 01-SEP-2000; 2000DE-01043826.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2002-139900/18.  
 XX  
 PT Oligonucleotide for diagnosing and treating tumors and cancer especially  
 PT gliomas, astrocytomas and oligodendromas, comprises chemically modified  
 PT genomic sequences of genes associated with tumors and cancers.  
 XX  
 PS Example 4; Page 23; 31pp; English.  
 XX



CC The invention relates to a nucleic acid (I) comprising a sequence of at  
CC least 18 bases of a segment of chemically pretreated genomic DNA (II)  
CC according to one of the sequences (S1) selected from 120 sequences, and  
CC its complementary sequences. Also included are an oligomer (III),  
CC especially an oligonucleotide or peptide nucleic acid (PNA)-oligomer,  
CC comprising a sequence of at least 9 nucleotides which hybridises to or is  
CC identical to (II), and complementary sequences, a set of oligomers (IV)  
CC comprising at least two (III) and their use for detecting the cytosine  
CC methylation state and/or single nucleotide polymorphisms (SNPs) in (II),  
CC and manufacturing (M1) an arrangement of different oligomers (array)  
CC fixed to a carrier material for analysing diseases associated with the  
CC methylation state of the CpG dinucleotide of (S1), where at least one  
CC oligomer is coupled to solid phase. The set of oligomers (IV) are useful  
CC as primer oligonucleotides for the amplification of (II) especially for  
CC characterising classifying and differentiating oligodendroglioma,  
CC astrocytoma and oligoastrocytoma tumours (by ascertaining genetic and/or  
CC epigenetic parameters of genomic DNA by analysing cytosine methylation  
CC and single nucleotide polymorphisms). The present sequence is a PCR  
CC primer used to amplify the modified genomic sequence from a gene  
CC associated with brain tumours  
XX  
SQ Sequence 18 BP; 3 A; 0 C; 9 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.4; DB 1; Length 18;  
Best Local Similarity 93.8%; Pred. No. 6e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 774 CCTCAAAACACGCCAAC 789  
Db 16 CCTCAAAACACCCCAAC 1  
  
RESULT 555  
AAD41922  
ID AAD41922 standard; DNA; 18 BP.  
XX  
AC AAD41922;  
XX  
DT 30-OCT-2002 (first entry)  
XX  
DE Human SRC-1 antisense oligonucleotide, ISRS 29855.  
XX  
KW Human; steroid receptor coactivator-1; SRC-1; antisense compound;  
KW diagnostic; therapeutic; prophylaxis; antisense therapy; antisense;  
KW phosphorothioate backbone; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..18  
FT /tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone"  
FT modified\_base 1..4  
FT /tag= b  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
FT modified\_base 3  
FT /tag= d  
FT /mod\_base= m5c  
FT modified\_base 7  
FT /tag= e  
FT /mod\_base= m5c  
FT modified\_base 13  
FT /tag= f  
FT /mod\_base= m5c  
FT modified\_base 15..18  
FT /tag= c  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
FT modified\_base 15  
FT /tag= g

FT /mod\_base= m5c  
XX WO200244325-A2.  
FN  
XX  
XX  
XX 06-JUN-2002.  
XX  
XX 26-NOV-2001; 2001WO-US044179.  
XX  
XX 27-NOV-2000; 2000US-00723379.  
PR  
XX (ISIS-) ISIS PHARM INC.  
PA (BAYU) BAYLOR COLLEGE MEDICINE.  
XX  
XX O'malley BW, Bennett CF, Cowse LM;  
XX WPI; 2002-537447/57.  
DR  
XX Novel antisense compound targeted to nucleic acid molecules encoding  
XX human steroid receptor coactivator-1 (SRC-1), useful for inhibiting  
FT expression of SRC-1 in human cells or tissues.  
FT  
XX  
XX Example 15; Page 79; 103pp; English.  
XX  
XX The invention relates to antisense compounds, compositions and methods  
XX for modulating the expression of human steroid receptor coactivator-1  
XX (SRC-1). The compositions comprise antisense oligonucleotides targeted  
XX to nucleic acids encoding SRC-1. The antisense compound is useful for  
XX inhibiting the expression of SRC-1 in human cells or tissues. It is also  
XX useful for treating a human having a disease or condition associated with  
XX SRC-1, by inhibiting expression of SRC-1. It is also useful for  
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
XX It is also used in antisense therapy. The present sequence is an  
XX antisense oligonucleotide targeted to human SRC-1 DNA. This sequence is  
XX used in the exemplification of the invention  
XX  
SQ Sequence 18 BP; 6 A; 4 C; 3 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.4; DB 1; Length 18;  
Best Local Similarity 93.8%; Pred. No. 6e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 152 AGCTGTCATGACACT 167  
Db 1 AGCTGTCATGTCACT 16  
  
RESULT 556  
ABZ10908  
ID ABZ10908 standard; DNA; 18 BP.  
XX  
XX AC ABZ10908;  
XX  
XX DT 16-JAN-2003 (first entry)  
XX  
XX DE Haematopoietic cell proliferation disorder related oligonucleotide #1048.  
XX  
XX KW Human; haematopoietic cell proliferation disorder; cytostatic;  
KW gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;  
KW cytosine methylation state; probe; primer; ss.  
XX  
XX OS Homo sapiens.  
OS Synthetic.  
XX  
XX PN WO200277272-A2.  
XX  
XX PD 03-OCT-2002.  
XX  
XX PF 26-MAR-2002; 2002WO-EP003401.  
XX  
XX PR 26-MAR-2001; 2001US-0278333P.  
XX  
XX PA (EPIG-) EPIGENOMICS AG.  
XX

PI Berlin K, Braun A, Distler J, Guetig D, Howe A, Mueller J;  
PI Olek A, Piepenbrock C, Adorjan P, Grabs G, Lesche R, Ley E,  
PI Lewin A, Lipscher E, Maier S, Model F, Mueller V, Otto T, Pelet C;  
PI Schwöbe I, Ziebarth H;  
XX WPI; 2003-018942/01.  
XX Detecting and differentiating between hematopoietic cell proliferative  
PT disorders, comprises contacting a target nucleic acid with a reagent that  
PT distinguishes between methylated and non-methylated CpG dinucleotides.  
XX  
XX Claim 15; Page 69; 117pp; English.  
XX  
XX The present invention describes a method for detecting and  
CC differentiating between hematopoietic cell proliferative disorders  
CC associated with at least 1 gene and/or their regulatory regions in a  
CC subject. The method comprises contacting a target nucleic acid in a  
CC biological sample obtained from the subject with at least 1 reagent,  
CC which distinguishes between methylated and non-methylated CpG  
CC dinucleotides within the target nucleic acid. AB209861 to AB211118  
CC represent specifically claimed nucleotide sequences from the present  
CC invention. Oligonucleotides from the present invention can be used: for  
CC differentiating between healthy hematopoietic cells and proliferative  
CC disorder hematopoietic cells; for differentiating between acute  
CC lymphocytic leukaemia and acute myelogenous leukaemia; as probes for  
CC determining the cytosine methylation state and/or single nucleotide  
CC polymorphisms (SNPs) of hematopoietic cell proliferation disorder  
CC related sequences and their complements; and as primers for the  
CC amplification of hematopoietic cell proliferation disorder related  
CC sequences. The nucleotide sequences from the present invention can also  
CC be used for detecting a predisposition to, differentiation between  
CC subclases, diagnosis, prognosis, treatment and/or monitoring of  
CC hematopoietic cell proliferative disorders. The present method enables a  
CC highly specific classification of hematopoietic cell proliferative  
CC disorders allowing for improved and informed treatment of patients  
XX  
XX Sequence 18 BP; 1 A; 0 C; 10 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;  
Best Local Similarity 93.8%; Pred. No. 6e+02; Mismatches 0; Gaps 0;  
Matches 15; Conservative 0;

QY 225 TGAGAGTGGTGGTGGT 240  
DB 3 TGAGGGTGGTGGTGGT 18  
|||||

RESULT 557  
ADA20557/c  
ID ADA20557 standard; DNA; 18 BP.  
XX  
AC ADA20557;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Prostate tumour related gene UBB PCR primer #2.  
XX  
KW cytostatic; gene therapy; genetic marker; epigenetic parameter;  
KW classification; differentiation; diagnosis; prostate tumour;  
KW prostate cancer; cytosine methylation; uracil;  
KW single nucleotide polymorphism; SNP; prostate carcinoma; ss; primer; PCR.  
XX  
OS Homo sapiens.  
XX  
PN WO2002103042-A2.  
XX  
PD 27-DEC-2002.  
XX  
PF 14-JUN-2002; 2002WO-EP006605.  
XX  
PR 14-JUN-2001; 2001DE-01028508.  
XX  
PA (EPIG-) EPIGENOMICS AG.

XX Distler J, Model F, Adorjan P;  
XX WPI; 2003-167536/16.  
XX  
XX Determining genetic and/or epigenetic parameters, useful for the  
PT classification, differentiation and/or diagnosis of prostate tumors or a  
PT predisposition to prostate cancer, comprises analyzing cytosine  
PT methylation.  
XX  
XX Example 2; Page 19; 376pp; English.

XX The invention relates to a method of determining genetic and/or  
CC epigenetic parameters for the classification, differentiation and/or  
CC diagnosis of prostate tumors or the predisposition to prostate cancer,  
CC by analyzing cytosine methylation in a sample of genomic DNA. The method  
CC comprises chemically treating unmethylated cytosine bases at the 5-  
CC position to uracil or another base, which is dissimilar to cytosine in  
CC terms of hybridization behaviour; followed by amplifying at least one  
CC fragment of the chemically pre-treated genomic DNA using sets of primer  
CC oligonucleotides and a polymerase. The oligomers or probes derived from  
CC them are useful for detecting the methylation state of all CpG  
CC dinucleotides and/or single nucleotide polymorphisms (SNPs) in a  
CC chemically pre-treated genomic DNA. They are all useful for treating  
CC prostate carcinoma. This sequence represents an oligonucleotide used to  
CC amplify a gene possibly involved in predisposition to prostate cancer  
CC which may contain methylated or unmethylated CpG dinucleotides.

Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;  
Best Local Similarity 93.8%; Pred. No. 6e+02; Mismatches 0; Gaps 0;  
Matches 15; Conservative 0;

QY 774 CCTCAAAACACGCCAAC 789  
DB 16 CCTCAAAACACGCCAAC 1  
|||||

RESULT 558  
ADA84360/c  
ID ADA84360 standard; DNA; 18 BP.  
XX  
AC ADA84360;

DT 20-NOV-2003 (first entry)

DE Human UNG PCR primer 1.

XX renal cancer; prostate cancer; cytosine methylation;  
KW single nucleotide polymorphism; histological; cytological; ss; primer;  
KW PCR.

OS Homo sapiens.

PN WO2002103041-A2.

PD 27-DEC-2002.

PF 14-JUN-2002; 2002WO-EP006603.

PR 14-JUN-2001; 2001DE-01028509.

PA (EPIG-) EPIGENOMICS AG.

XX Distler J, Model F, Adorjan P;

XX WPI; 2003-183991/18.

XX Method for characterizing, classifying and/or differentiating renal and  
PT prostate cancers, by analyzing the genetic and/or epigenetic parameters  
PT of genomic DNA, particularly by determining its cytosine methylation  
PT status.

```

XX PS Example 2; Page 19; 21lpp; English.
XX CC The invention relates to a novel method for characterising, classifying
XX CC and/or differentiating renal and prostate cancer. The method comprises
XX CC extracting genomic DNA from a biological sample, converting cytosine
XX CC bases (by chemical treatment) that are unmethylated at the 5-position to
XX CC uracil or another base, and amplifying at least one fragment of the
XX CC chemically pretreated genomic DNA using sets of primer oligonucleotides
XX CC and a polymerase. The method is useful for detecting the cytosine
XX CC methylation state and/or single nucleotide polymorphisms in genomic DNA,
XX CC particularly for characterising, classifying and/or differentiating renal
XX CC and prostate cancers. The oligomers are useful as primer oligonucleotides
XX CC for the amplification of any of the 112 DNA sequences of the invention.
XX CC The set of oligomer probes is useful for detecting the cytosine
XX CC methylation state and/or single nucleotide polymorphisms in any of the
XX CC 112 chemically pretreated genomic DNA sequences. The method is also
XX CC useful for identifying the tissue of origin of cancer cells. The method
XX CC allows the classification, differentiation and/or diagnosis of cancer
XX CC tissues using minute samples which would be inadequate for histological
XX CC or cytological analysis. The present sequence is used in the
XX CC exemplification of the invention.
XX SQ Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;
      Query Match      0.8%; Score 14.4; DB 1; Length 18;
      Best Local Similarity 93.8%; Pred. No. 6e+02;
      Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 774 CCTCAACACGCCCAAC 789
Db 16 CCTCAACACGCCCAAC 1

RESULT 559
ID ABQ80440/c
XX AC ABQ80440;
XX DE 04-DEC-2003 (first entry)
XX DT Primer: Rat PEPCK forward.
XX KW Primer; amplify; PCR; PEPCK; phosphoenolpyruvate carboxykinase; SHP;
XX KW short heterodimer partner; Zucker; diabetic; fatty; rat; ZDF; insulin;
XX KW gluconeogenesis; glucose production; hyperglycemia; hypocalcaemia;
XX KW obesity; glucose tolerance; insulin resistance; metabolic syndrome X;
XX KW Type 2; diabetes; Type 1; cardiovascular disease; ss.
XX OS Rattus rattus.
XX PN WO2003059253-A2.
XX PD 24-JUL-2003.
XX PF 18-DEC-2002; 2002WO-US040360.
XX PR 21-DEC-2001; 2001US-0344876P.
XX PA (SMIK ) SMITHKLINE BEECHAM CORP.
XX PI Klierer SA, Goodwin BJ, Way JM;
XX XX WPI; 2003-627344/59.
XX DR Composition useful for altering gluconeogenesis or glucose production in
XX PT the treatment of e.g. insulin resistance or cardiovascular disease
XX PT comprises an agent which modulates short heterodimer partner expression
XX PT or activity.
XX PS Example 1; Page 12; 9pp; English.

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CC The sequences given in ABQ80440-45 are primers and probes which were used
CC to determine PEPCK (phosphoenolpyruvate carboxykinase) and SHP (short
CC heterodimer partner) expression in Zucker diabetic fatty (ZDF) fa/fa rats
CC treated with insulin. The composition of the invention for alteration of
CC gluconeogenesis or glucose production comprises an agent which modulates
CC SHP expression or activity. The composition is used for altering
CC gluconeogenesis or production of glucose useful for treating
CC hyperglycemia or hypocalcaemia; for treating obesity, impaired glucose
CC tolerance, insulin resistance, metabolic syndrome X, Type 2 diabetes,
CC Type 1 diabetes, or cardiovascular disease. The agent induces, increases,
CC inhibits or decreases expression or activity of SHP
XX SQ Sequence 18 BP; 5 A; 0 C; 8 G; 5 T; 0 U; 0 Other;
      Query Match      0.8%; Score 14.4; DB 1; Length 18;
      Best Local Similarity 93.8%; Pred. No. 6e+02;
      Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 1481 TCCACAAACTTCCTGA 1496
Db 16 TCCACAAACTTCCTCA 1

RESULT 560
AAD60490/c
XX ID AAD60490 standard; DNA; 18 BP.
XX AC AAD60490;
XX DT 18-DEC-2003 (first entry)
XX DE Human c-IAP-2 antisense oligonucleotide #ISIS #23463.
XX KW Human; antisense; cellular inhibitor of apoptosis-2; c-IAP-2; cancer;
XX KW hyperproliferative condition; apoptosis inhibitor 2; autoimmune disease;
XX KW API-1; hIAP-1; MHC; gene therapy; phosphorothioate; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..18
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone; All cytidine residues
XX FT are 5-methylcytidines"
XX FT modified_base 1..4
XX FT /tag= b
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX FT modified_base 15..18
XX FT /tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX PN US2003083300-A1.
XX XX 01-MAY-2003.
XX XX 16-JUL-2002; 2002US-00197290.
XX XX 23-SEP-1999; 99WO-US022083.
XX XX 04-OCT-2001; 2001US-00857299.
XX XX (BENN/) BENNETT C F.
XX XX (ACKE/) ACKERMANN E J.
XX XX (COWS/) COWSERT L M.
XX PI Bennett CF, Ackermann EJ, Cowsert LM;
XX XX WPI; 2003-755119/71.
XX DR New antisense compound, preferably an oligonucleotide, for inhibiting
XX PT

```

PT expression of human Cellular Inhibitor of Apoptosis-2 in human cells or  
 PT tissues, and for treating diseases, such as cancer or an autoimmune  
 PT disease.

PS Claim 3; Page 22; 34pp; English.

XX The invention relates to antisense compounds targetted to a nucleic acid  
 CC encoding human cellular inhibitor of apoptosis-2 (also known as c-IAP-2,  
 CC apoptosis inhibitor 2, API-1, hIAP-1 and MHC) to inhibit its expression.  
 CC Antisense compounds of the invention are used to induce apoptosis in  
 CC human cells or tissues to treat diseases or conditions associated with  
 CC insufficient apoptosis. They are used to treat diseases or conditions  
 CC associated with c-IAP-2 such as hyperproliferative conditions especially  
 CC cancer or autoimmune diseases. The invention is also useful in antisense  
 CC gene therapy. The present sequence is an antisense oligonucleotide  
 CC targetted to human c-IAP-2 DNA

XX Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 18;  
 Best Local Similarity 93.8%; Pred. No. 6e+02; 1; Indels 0; Gaps 0;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 513 CCGGAGAGCTGACC 528  
 |||||  
 Db 16 CCGGAGAGCTGACC 1

# RESULT 561

AAT74921/C

ID AAT74921 standard; DNA; 19 BP.

XX AAT74921;

AC AAT74921;

DT 07-JAN-1998 (first entry)

XX 3'-primer for HLA DR2 (15 and 16) allele amplification.

DE polymorphic; Human leukocyte antigen; HLA; DNA sequencing; PCR;

XX polymerase chain reaction; allele; ss.

KW Synthetic.

OS WO9723650-A2.

PN 03-JUL-1997.

PD 19-DEC-1996; 96WO-US020202.

PF 22-DEC-1995; 95US-00577858.

PR (VISI-) VISIBLE GENETICS INC.

XX Stevens JK, Dunn JM, Leushner J, Green RJ;

PI WPI; 1997-351085/32.

DR Identification of allele type of a known polymorphic genetic locus - used

XX particularly for human leukocyte antigen allele determination.

PT Example 1; Page 17; 75pp; English.

XX This 3'-PCR primer is used in a novel method for identification of allele

CC types (in this case human leukocyte antigen (HLA) class II gene alleles)

CC of a known polymorphic genetic locus in a sample. The allele type is

CC identified by first combining the sample with a sequencing reaction

CC mixture containing a polymerase, nucleoside feed stocks, one type of

CC chain terminating nucleoside and a sequencing primer under conditions

CC suitable for template dependent primer extension to form a number of

CC oligonucleotide fragments of differing lengths, which are then evaluated

CC on a denaturing gel. This determines the position of the type of base

CC corresponding to the chain terminating bases in the primer. However, this

CC method differs from standard sequencing procedures, instead of performing

CC and evaluating four concurrent reactions, the sample is concurrently  
 CC combined with at most three sequencing reaction mixtures containing  
 CC different types of chain terminating nucleosides. The method can be used  
 CC for the evaluation of polymorphic sites, and for determining the allelic  
 CC type of a polymorphic gene. The methods are particularly useful for  
 CC determining the HLA allele present in a sample

XX Sequence 19 BP; 2 A; 7 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 6.3e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1590 CCGCGGTGGTGACACC 1605  
 |||||  
 Db 17 CCGCGGTGGTGACACC 2

# RESULT 562

AAV13329

ID AAV13329 standard; DNA; 19 BP.

XX AAV13329;

AC AAV13329;

DT 14-MAY-1998 (first entry)

XX Sense primer Exon 11 for human 5-lipoxygenase gene.

DE Inflammatory disease; polymorphism; 5-lipoxygenase; asthma;

XX ulcerative colitis; bronchitis; sinusitis; psoriasis; rhinitis;

KW arthritis; diagnosis; treatment; PCR primer; ss.

OS Synthetic.

OS Homo sapiens.

XX WO9742347-A2.

PN 13-NOV-1997.

PD 29-APR-1997; 97WO-US007137.

PF 06-MAY-1996; 96US-0016890P.

PR 25-APR-1997; 97US-00846020.

XX (BGHM) BRIGHAM & WOMENS HOSPITAL.

XX Drazen JM, In K, Asano K, Beier D, Grubholz J;

XX WPI; 1997-558997/51.

DR Classifying patients with inflammatory disease, specifically asthma -

XX according to polymorphisms in 5-lipoxygenase gene regulatory region, e.g.

PT to identify candidates for lipoxygenase inhibitor treatment.

XX Example 1; Page 19; 56pp; English.

XX The present sequence was used in the development of a novel method for

CC classifying patients suffering from an inflammatory disease. The method

CC comprises identifying in DNA from at least 1 patient a sequence

CC polymorphism, as compared with the normal 5-lipoxygenase (5-LOX) gene

CC (AAT88431), in a 5-LOX regulatory gene sequence. The method can be

CC applied to subjects with asthma, ulcerative colitis, bronchitis,

CC sinusitis, psoriasis, allergic and non-allergic rhinitis, lupus or

CC rheumatoid arthritis. Specifically it can be used to diagnose asthma or

CC susceptibility to disease, identify treatments suitable for individual

CC patients or assess the likely success of treatment

XX Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;

QY Query Match 0.8%; Score 14.4; DB 1; Length 19;

Best Local Similarity 93.8%; Pred. No. 6.3e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1716 CCTGAGCCATGTTTCAC 1731  
Db 3 CCTGAGCCATGTTTCAC 18

RESULT 563  
AAA82758  
ID AAA82758 standard; DNA; 19 BP.  
AC AAA82758;  
XX  
XX 04-DEC-2000 (first entry)  
XX cdk3 ribozyme binding site #43.  
XX  
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX  
XX Mammalia.  
XX  
XX WO200032765-A2.  
XX  
XX 08-JUN-2000.  
XX  
XX 06-DEC-1999; 99WO-US028772.  
XX  
XX 04-DEC-1998; 98US-0110954P.  
XX (IMMU-) INMUSOL INC.  
XX  
XX Tritz R, Welch PJ, Barber JR, Robbins JM;  
XX  
XX WPI; 2000-412314/35.  
XX  
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.  
XX  
XX Disclosure; Page 51; 109pp; English.  
XX  
XX The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX  
XX Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 14.4; DB 1; Length 19;  
Best Local Similarity 93.8%; Pred. No. 6.3e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 996 CTGCTCATCAACGAG 1011  
Db 1 CTGCTCATCAATGAG 16

RESULT 564  
AAA14782/c  
ID AAA14782 standard; DNA; 19 BP.  
XX  
XX AAA14782;  
AC  
XX  
XX 08-AUG-2000 (first entry)  
XX  
XX PCR primer used to isolate DNA encoding a decorin binding protein.  
DE  
XX Decorin binding protein; DbpA; DbpB; adhesin; infection; Lyme disease;  
KW Spirochete infection; vaccine; passive immunotherapy; PCR primer; ss.  
KW  
XX Borrelia burgdorferi.  
OS

Qy 910 GTGAACTGTTCTCTGT 925  
Db 17 GTGAACTGTTCTCTGT 2

RESULT 565  
AAZ57154  
ID AAZ57154 standard; DNA; 19 BP.  
XX  
XX AAZ57154;  
AC  
XX  
XX 03-APR-2000 (first entry)  
XX  
XX Phosphorothioate 19-mer oligonucleotide #6.  
DE  
XX Phosphorothioate; activator; oligonucleotide synthesis; phosphoramidite;  
KW phosphorylating reagent; ss.  
KW  
XX Synthetic.  
OS  
XX  
XX Key Location/Qualifiers  
FH modified\_base 1..19  
FT /tag= a  
FT /note= "phosphorothioate linkages"  
FT  
XX  
XX WO9962922-A1.  
XX  
XX 09-DEC-1999.  
XX  
XX 02-JUN-1999; 99WO-US012251.  
XX  
XX 02-JUN-1998; 98US-0087757P.  
PR 23-OCT-1998; 98US-00177953.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX

XX WO200021989-A1.  
XX  
XX 20-APR-2000.  
XX  
XX 08-OCT-1999; 99WO-US023481.  
XX  
XX 09-OCT-1998; 98US-0103728P.  
XX  
XX (MEDI-) MEDIMUNE INC.  
XX  
XX Hanson MS, Mullikin BA, Roberts W, Lathigra R;  
XX  
XX WPI; 2000-317936/27.  
XX  
XX Novel decorin binding proteins, DBP A and B useful as vaccines for  
PT protecting humans against Lyme disease and as immunogens for production  
PT of antibodies used in passive immunotherapy, or as diagnostic reagents.  
XX  
XX Disclosure; Page 86; 93pp; English.  
XX  
XX The present sequence represents a primer which was used to isolate DNA  
CC encoding a decorin binding protein (Dbp). The specification describes  
CC DbpA and DbpB. DbpA and DbpB are adhesins, and are immunogenic. DbpA is a  
CC target for antibody-mediated killing of B. burgdorferi during the early  
CC stages of infection. The polypeptides are useful for producing antibodies  
CC to diagnose Lyme disease (spirochete infections), or for producing  
CC vaccines for prophylaxis and/or treatment of such infections. The  
CC antibodies may be useful in passive immunotherapy, as diagnostic reagents  
CC and as reagents in other processes such as affinity chromatography  
XX  
XX Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 14.4; DB 1; Length 19;  
Best Local Similarity 93.8%; Pred. No. 6.3e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;



PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
XX  
PS Example 1; Page 97; 408pp; English.  
XX  
CC The present invention describes a method for treating a proliferative  
CC skin or eye disease and scarring. The method involves administering a  
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
CC dependent kinase, growth factor or a reductase, or administering a  
CC nucleic acid molecule (II) comprising a promoter operably linked to a  
CC nucleic acid segment encoding (I). (I) can have antiproliferative,  
CC dermatological, cytostatic, antiseborrheic, anti-diabetic, anisickling,  
CC ophthalmological, vulnary, keratolytic and virucide activities, and  
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic  
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention  
XX  
SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.4; DB 1; Length 19;  
Best Local Similarity 93.8%; Pred. No. 6.3e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 996 CCTGCTCATCAACGAG 1011  
DB 1 CCTGCTCATCAATGAG 16  
  
RESULT 568  
AAL51775/C  
ID AAL51775 standard; DNA; 19 BP.  
XX  
AC AAL51775;  
XX  
XX  
DT 24-APR-2003 (first entry)  
DE TNF alpha PCR primer #2.  
XX  
XX Screening; G protein-coupled receptor; cholesterol metabolism; ss;  
XX inflammatory disease; transplantation rejection; immune insufficiency;  
XX infection; PCR; primer; TNF alpha.  
XX  
OS Unidentified.  
XX  
PN WO200284286-A1.  
XX  
PD 24-OCT-2002.  
XX  
PF 11-APR-2002; 2002WO-JP003613.  
XX  
PR 12-APR-2001; 2001JP-00114203.  
PR 14-JUN-2001; 2001JP-00180562.  
PR 16-JUL-2001; 2001JP-00214922.  
PR 27-DEC-2001; 2001JP-00397767.  
PR 22-FEB-2002; 2002JP-00045728.  
XX  
PA (TAKE ) TAKEDA CHEM IND LTD.  
XX  
XX Hinuma S, Fujii R, Kawamata Y, Miwa M, Hosoya M;  
PI WPI; 2003-075569/07.  
XX  
XX  
XX Screening method for agonists or antagonists to alter binding properties  
PT of novel G protein-coupled receptor protein in controlling cholesterol  
PT metabolism, used to diagnose and treat inflammatory diseases or  
PT infections.

XX Disclosure; Page 174; 186pp; Japanese.  
PS  
XX The invention comprises a method for screening for compounds that are  
CC capable of changing the binding properties of a G protein-coupled  
CC receptor protein. The method of the invention is useful for screening  
CC agonists or antagonists to alter binding properties of novel G protein-  
CC coupled receptor proteins in controlling cholesterol metabolism. The  
CC method of the invention is useful in the diagnosis and treatment of  
CC inflammatory diseases, excessive immune reaction after transplantation,  
CC immune insufficiency and infections. The present DNA sequence represents  
CC a TNF alpha PCR primer  
XX  
SQ Sequence 19 BP; 2 A; 4 C; 6 G; 7 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.4; DB 1; Length 19;  
Best Local Similarity 93.8%; Pred. No. 6.3e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 676 AAGCTCACACACACC 691  
DB 17 AAGCTCACGACACC 2  
  
RESULT 569  
ADA25683  
ID ADA25683 standard; RNA; 19 BP.  
XX  
AC ADA25683;  
XX  
DT 20-NOV-2003 (first entry)  
DE Human REL-A short interfering nucleic acid SEQ ID NO:31.  
XX  
XX short interfering nucleic acid; siRNA; nuclear factor kappa B; NF-kappaB;  
XX RNA interference; vasotropic; neurotropic; anti-parkinsonian;  
XX neuroprotective; cytostatic; anti-inflammatory; antiallergic; virucide;  
XX anti-HIV; immunosuppressive; anticonvulsant; nephrotropic; gene therapy;  
XX modulation; inhibition; restenosis; central nervous system lesion;  
XX Alzheimer's disease; Parkinson's disease; Huntington's disease; epilepsy;  
XX dementia; amyotrophic lateral sclerosis; cancer;  
XX polycystic kidney disease; inflammatory disease; allergic disease;  
XX viral infection; HIV; autoimmune disease; transplant rejection; ribozyme;  
XX human; v-rel reticuloendotheliosis viral oncogene homologue A; REL-A;  
XX nuclear factor; ss.  
XX  
OS Synthetic  
OS Homo sapiens.  
XX  
XX WO2003070970-A2.  
XX  
XX 28-AUG-2003.  
XX  
XX 20-FEB-2003; 2003WO-US004951.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
PI WPI; 2003-689788/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the NF-  
PT kappaB gene useful e.g. for treatment and diagnosis of cancer and  
PT inflammation.  
XX

PS Example 3; Page 127; 149pp; English.

XX The present invention describes a short interfering nucleic acid (siNA)

CC that downregulates expression of a nuclear factor kappa B (NF-kappaB)

CC gene by RNA interference. Also described: (1) kits for in vitro or in

CC vivo delivery of siNA; (2) conjugates and/or complexes of siNA; and (3)

CC vectors that express siNA. The siNAs have vasotropic, neurotropic,

CC antiparkinsonian, neuroprotective, cytoskeletal, antiinflammatory,

CC antiallergic, virucide, anti-HIV, immunosuppressive, anticonvulsant and

CC nephrotropic activities, and can be used in gene therapy, and for the

CC modulation (inhibition) of expression or activity of NF-kappaB by RNA

CC interference (siNA target mRNA, RNA splice variants, post-

CC transcriptionally modified RNA, pre-RNA and/or RNA templates). The siNA

CC sequences can be used to modulate expression of NF-kappaB genes, in

CC cells, tissue explants or organisms, e.g. by ex vivo gene therapy, in

CC grafts and transplants for treating restenosis and central nervous system

CC lesions and injuries (Alzheimer's, Parkinson's or Huntington's diseases,

CC epilepsy, dementia or amyotrophic lateral sclerosis) or for treating many

CC cancers, other proliferative diseases (restenosis and polycystic kidney

CC disease), inflammatory and/or allergic diseases, viral infections

CC (including HIV), autoimmune diseases and transplant rejection, and also

CC for drug screening; diagnosis; target identification and validation;

CC genetic engineering; pharmacogenomics; studying gene function and gene

CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence

CC represents human v-rel reticuloendotheliosis viral oncogene homologue A

CC (REL-A) siNA, which is used in the exemplification of the present

CC invention. REL-A is a nuclear factor of the kappa light polypeptide gene

CC enhancer in B-cells.

XX Sequence 19 BP; 4 A; 6 C; 3 G; 0 T; 6 U; 0 Other;

SQ Query Match 0.8%; Score 14.4; DB 1; Length 19;

Best Local Similarity 68.8%; Pred. No. 6.3e+02;

Matches 11; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 538 CCCATCTTTGACAGC 553

DB 1 CCCAUCUUUGACAUC 16

RESULT 570

ADA26032/c

ID ADA26032 standard; RNA; 19 BP.

XX AC ADA26032;

XX DT 20-NOV-2003 (first entry)

XX DE Human REL-A short interfering nucleic acid SEQ ID NO:167.

XX KW short interfering nucleic acid; siNA; nuclear factor kappa B; NF-kappaB;

XX KW RNA interference; vasotropic; neurotropic; antiparkinsonian;

XX KW neuroprotective; cytoskeletal; antiinflammatory; antiallergic; virucide;

XX KW anti-HIV; immunosuppressive; anticonvulsant; nephrotropic; gene therapy;

XX KW modulation; inhibition; restenosis; central nervous system lesion;

XX KW Alzheimer's disease; Parkinson's disease; Huntington's disease; epilepsy;

XX KW dementia; amyotrophic lateral sclerosis; cancer;

XX KW polycystic kidney disease; inflammatory disease; allergic disease;

XX KW viral infection; HIV; autoimmune disease; transplant rejection; ribozyme;

XX KW human; v-rel reticuloendotheliosis viral oncogene homologue A; REL-A;

XX KW nuclear factor; ss.

XX OS Synthetic.

XX OS Homo sapiens.

XX PN WO2003070970-A2.

XX PD 28-AUG-2003.

XX PF 20-FEB-2003; 2003WO-US004951.

XX PR 20-FEB-2002; 2002US-0356580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 15-SEP-2002; 2002US-0409293P.

XX 15-JAN-2003; 2003US-0440129P.

PA (RIBO-) RIBOZYME PHARM INC.

XX McSwiggen J, Beigelman L;

XX WPI; 2003-689788/6S.

XX New short interfering nucleic acid downregulates expression of the NF-

PT kappaB gene useful e.g. for treatment and diagnosis of cancer and

PT inflammation.

XX Example 3; Page 127; 149pp; English.

XX The present invention describes a short interfering nucleic acid (siNA)

CC that downregulates expression of a nuclear factor kappa B (NF-kappaB)

CC gene by RNA interference. Also described: (1) kits for in vitro or in

CC vivo delivery of siNA; (2) conjugates and/or complexes of siNA; and (3)

CC vectors that express siNA. The siNAs have vasotropic, neurotropic,

CC antiparkinsonian, neuroprotective, cytoskeletal, antiinflammatory,

CC antiallergic, virucide, anti-HIV, immunosuppressive, anticonvulsant and

CC nephrotropic activities, and can be used in gene therapy, and for the

CC modulation (inhibition) of expression or activity of NF-kappaB by RNA

CC interference (siNA target mRNA, RNA splice variants, post-

CC transcriptionally modified RNA, pre-RNA and/or RNA templates). The siNA

CC sequences can be used to modulate expression of NF-kappaB genes, in

CC cells, tissue explants or organisms, e.g. by ex vivo gene therapy, in

CC grafts and transplants for treating restenosis and central nervous system

CC lesions and injuries (Alzheimer's, Parkinson's or Huntington's diseases,

CC epilepsy, dementia or amyotrophic lateral sclerosis) or for treating many

CC cancers, other proliferative diseases (restenosis and polycystic kidney

CC disease), inflammatory and/or allergic diseases, viral infections

CC (including HIV), autoimmune diseases and transplant rejection, and also

CC for drug screening; diagnosis; target identification and validation;

CC genetic engineering; pharmacogenomics; studying gene function and gene

CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence

CC represents human v-rel reticuloendotheliosis viral oncogene homologue A

CC (REL-A) siNA, which is used in the exemplification of the present

CC invention. REL-A is a nuclear factor of the kappa light polypeptide gene

CC enhancer in B-cells.

XX Sequence 19 BP; 6 A; 3 C; 6 G; 0 T; 4 U; 0 Other;

SQ Query Match 0.8%; Score 14.4; DB 1; Length 19;

Best Local Similarity 93.8%; Pred. No. 6.3e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 538 CCCATCTTTGACAGC 553

DB 19 CCCATCTTTGACAATC 4

RESULT 571

AAQ30930/c

ID AAQ30930 standard; DNA; 20 BP.

XX AC AAQ30930;

XX DT 23-MAR-1993 (first entry)

XX DE tdh 4.

XX KW Vibrio parahaemolyticus; thermostable direct; haemolysin-related;

XX KW haemolysin gene; type 2; type 1; V.p; polymerase chain reaction; PCR;

XX KW primer; detection; ss.

XX OS Synthetic.

XX PN JF04293486-A.



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SQ      Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
      Query Match          0.8%; Score 14.4; DB 1; Length 20;
      Best Local Similarity 93.8%; Pred. No. 6.7e+02;
      Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      224 ATGAGAGTGGTGGTGG 239
      Db      16 ATGAGAGTGGTAGTGG 1

RESULT 573
AAQ48094/c
ID      AAQ48094 standard; DNA; 20 BP.
XX
XX      AAQ48094;
XX
XX      25-MAR-2003 (revised)
DT      10-FEB-1994 (first entry)
XX
XX      Vibrio parahaemolyticus tdh gene PCR primer (f).
XX
XX      Thermostable direct haemolysin gene; tdh; bacterial detection;
XX      nucleic acid amplification; polymerase chain reaction; PCR;
XX      food poisoning; ss.
XX
XX      Synthetic.
XX
XX      BP556504-A2.
XX
XX      25-AUG-1993.
XX
XX      20-AUG-1992; 92EP-00307606.
XX
XX      18-FEB-1992; 92JP-00030755.
XX
XX      24-MAR-1992; 92JP-00066082.
XX
XX      (SHXA ) SHIMADZU CORP.
XX
XX      Ohashi T, Tada J, Fukushima S, Ozaki H, Nishimura N, Shirasaki Y;
XX      Yamagata K;
XX      WPI; 1993-265932/34.
XX
XX      Oligo:nucleotide(s) specific for Vibrio parahaemolyticus, E.coli or
XX      S.aureus - used as primers or probes partic. for detecting food poisoning
XX      and in food inspection.
XX
XX      Claim 2; Page 119; 122pp; English.
XX
XX      Oligonucleotides AAQ48091-Q48094 (designated primers c, d, e and f,
XX      respectively) are complementary to a target sequence from the tdh gene
XX      from V.parahaemolyticus. they are used as PCR primers in the following
XX      pairs: c/d, e/d, e/f to specifically amplify fragments of 373, 199 or
XX      251bp, respectively, from the tdh gene. (Updated on 25-MAR-2003 to
XX      correct PN field.)
XX
XX      Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
XX
XX      Query Match          0.8%; Score 14.4; DB 1; Length 20;
XX      Best Local Similarity 93.8%; Pred. No. 6.7e+02;
XX      Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      224 ATGAGAGTGGTGGTGG 239
      Db      16 ATGAGAGTGGTAGTGG 1

RESULT 574
AAQ46093/c
ID      AAQ46093 standard; DNA; 20 BP.
XX
XX      AC      AAQ46093;

```

|            |   |  |
|------------|---|--|
| XX         | 15-FEB-1994 (first entry)   |  |
| DT         |   |  |
| XX         | Oligonucleotide used for production of probe for tdh gene.                |  |
| DE         |   |  |
| XX         | Probe; enzyme labelling; transglutaminase; ss.                            |  |
| KW         |   |  |
| XX         | Vibrio parahaemolyticus.  |  |
| OS         |   |  |
| XX         | JF05192149-A.   |  |
| PN         |   |  |
| XX         | 03-AUG-1993.  |  |
| PD         |   |  |
| XX         | 24-OCT-1991; 91JP-00277754.   |  |
| PF         |   |  |
| XX         | 24-OCT-1991; 91JP-00277754.   |  |
| PR         |   |  |
| XX         | (SHMA ) SHIMADZU CORP.  |  |
| XX         |   |  |
| PA         |   |  |
| XX         | WPI; 1993-277466/35.  |  |
| DR         |   |  |
| XX         | Prepn. of DNA probe - by introducing amino gp. at 5'-terminal of DNA,     |  |
| PT         | then bonding labelling substance to DNA using transglutaminase.           |  |
| XX         |   |  |
| PS         | Disclosure; Page 3; 5pp; Japanese.  |  |
| XX         |   |  |
| CC         | The DNA probe is prepared by introducing an amino group at the 5'         |  |
| CC         | terminus of DNA or a nucleotide, followed by using transglutaminase to    |  |
| CC         | bond a labelling substance to the obtained DNA having the introduced      |  |
| CC         | amino group. The enzymatic reaction using transglutaminase is advantage   |  |
| CC         | in time and cost since many chemical reaction stages associated with      |  |
| CC         | e.g. radiolabelling of probes can be by-passed. The enzymatic reaction is |  |
| CC         | mild, decrease of activity of the labelled compound can be minimised and  |  |
| CC         | producibility is increased  |  |
| XX         |   |  |
| SQ         | Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;                         |  |
|            |   |  |
|            | Query Match 0.8%; Score 14.4; DB 1; Length 20;                            |  |
|            | Best Local Similarity 93.8%; Pred.No. 6.7e+02;                            |  |
|            | Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;               |  |
| QY         | 224 ATCAGAGTGGTGGTGG 239  |  |
| DB         |   |  |
|            | 16 ATCAGAGTGGTAGTGG 1   |  |
|            |   |  |
| RESULT 575 |   |  |
| AAQ46096/c |   |  |
| ID         | AAQ46096 standard; DNA; 20 BP.  |  |
| XX         |   |  |
| AC         | AAQ46096;   |  |
| XX         |   |  |
| DT         | 15-FEB-1994 (first entry)   |  |
| XX         |   |  |
| DE         | PCR primer used for amplifying Vibrio parahaemolyticus tdh gene.          |  |
| XX         |   |  |
| KW         | Probe; enzyme labelling; transglutaminase; ss.                            |  |
| OS         | Synthetic.  |  |
| XX         |   |  |
| PN         | JF05192149-A.   |  |
| XX         |   |  |
| PD         | 03-AUG-1993.  |  |
| XX         |   |  |
| PF         | 24-OCT-1991; 91JP-00277754.   |  |
| XX         |   |  |
| PR         | 24-OCT-1991; 91JP-00277754.   |  |
| XX         |   |  |
| PA         | (SHMA ) SHIMADZU CORP.  |  |
| XX         |   |  |
| DR         | WPI; 1993-277466/35.  |  |
| XX         |   |  |
| PT         | Prepn. of DNA probe - by introducing amino gp. at 5'-terminal of DNA,     |  |

then bonding labelling substance to DNA using transglutaminase.

Disclosure; Page 3; 5pp; Japanese.

The DNA probe is prepared by introducing an amino group at the 5' terminus of DNA or a nucleotide, followed by using transglutaminase to bond a labelling substance to the obtained DNA having the introduced amino group. The enzymatic reaction using transglutaminase is advantageous in time and cost since many chemical reaction stages associated with e.g. radiolabelling of probes can be by-passed. The enzymatic reaction is mild, decrease of activity of the labelled compound can be minimised and productivity is increased. Two PCR primers (AAQ46095, AAQ46096) were used to amplify DNA samples prepared from *Vibrio parahaemolyticus* WP1 strain

Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;  
Best Local Similarity 93.8%; Pred.No. 6.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 224 ATGAGAGTGGTGGTGG 239  
Db 16 ATGAGAGTGGTAGTGG 1

RESULT 576  
AAQ68498/c  
ID AAQ68498 standard; DNA; 20 BP.  
XX  
AC AAQ68498;  
XX  
DT 27-FEB-1995 (first entry)  
XX  
DE *Vibrio parahaemolyticus* DNA primer.  
XX  
KW *Vibrio parahaemolyticus*; *Vibrio cholerae*; detection; amplification;  
KW primer; polymerase chain reaction; PCR; ss.  
XX  
OS Synthetic.  
XX  
PN JP06165698-A.  
XX  
PD 14-JUN-1994.  
XX  
PF 16-JUL-1993; 93JP-00176749.  
XX  
PR 30-SEP-1992; 92JP-00261899.  
XX  
PA (SHIMA) SHIMADZU CORP.  
XX  
DR WPI; 1994-230239/28.  
XX  
DR  
XX  
PT Detection of nucleic acid - using polymerase chain reaction and solid  
PT phase recognition.  
XX  
PS Claim 3; Page 2; 9pp; Japanese.  
XX  
XX  
CC The primers given in AAQ68497-500 are used in the detection of V.  
CC *parahaemolyticus* DNA. The primers given in AAQ68501-503 are used in the  
CC detection of V. *cholerae* DNA  
XX  
SQ Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;  
Best Local Similarity 93.8%; Pred.No. 6.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 224 ATGAGAGTGGTGGTGG 239  
Db 16 ATGAGAGTGGTAGTGG 1

XX PD 23-JAN-1997.  
XX PF 17-JUN-1996; 96WO-US010469.  
XX AC AAT60442;  
XX DT 09-JUL-1997 (first entry)  
XX DE Tyrosine kinase Tnki primer A.  
XX KW Tyrosine kinase; Tnki; signal transduction; cell transformation;  
KW cell proliferation; haematopoietic cell; bone marrow; cancer;  
KW gene therapy; diagnosis; polymerase chain reaction; PCR; primer;  
KW rapid amplification of cDNA ends; 5' RACE; ss.  
XX OS Synthetic.  
XX PN WO9713846-A1.  
XX PD 17-APR-1997.  
XX PF 11-OCT-1996; 96WO-US016359.  
XX PR 12-OCT-1995; 95US-0005286P.  
XX PA (UJJO ) UNIV JOHNS HOPKINS.  
XX PI Civin Ci, Small D, Hoehn GT;  
XX DR WPI; 1997-235882/21.  
XX KW Tnki intracellular tyrosine kinase and its splice variant - useful in  
PT gene therapy to inhibit cell transformation, stimulate haematopoietic  
PT cells etc. and for diagnosis.  
XX PS Example 1; Page 34; 69pp; English.  
XX CC PCR primers (AAT60438-43) were used in 5'RACE and 3'RACE amplifications  
CC of K562 cell cDNA in order to isolate full-length clones for the novel  
CC human intracellular tyrosine kinase Tnki (AAT60433) and for its splice  
CC variant Tnki-alpha (AAT60434). Primer A (AAT60442) is specific for Tnki.  
CC and was used to identify Tnki sequences in 5'RACE products cloned into  
CC vector TA  
XX SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.4; DB 1; Length 20;  
Best Local Similarity 93.8%; Pred. No. 6.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
XX QY 1022 TCAAGCTGGCTGACTT 1037  
XX DB 4 TCAAGCTGGCTGACTT 19  
RESULT 578  
AAT85490/C  
ID AAT85490 standard; cDNA; 20 BP.  
XX AC AAT85490;  
XX DT 17-NOV-1997 (first entry)  
XX DE Oligo #2 used to isolate hALR cDNA sequence.  
XX KW Human; netrin; ATPase binding cassette transporter; ribosomal L3;  
KW augmentor of liver regeneration; hNET; hABC3; SEM L3; hALR;  
KW Chromosome 16; exon trapping; axon; chicken; laminin domain; C. elegans;  
KW UNC-6; cystic fibrosis; ss.  
XX OS Synthetic.  
XX PN WO9702346-A2.

XX PD 23-JAN-1997.  
XX PF 17-JUN-1996; 96WO-US010469.  
XX PR 30-JUN-1995; 95US-0000596P.  
XX PA (GENZ ) GENZYME CORP.  
XX PI Landes GM, Burn TC, Connors TD, Dackowski WR, Klinger KW;  
PI Van Raay TJ;  
XX DR WPI; 1997-108959/10.  
XX PT New isolated human chromosome 16 Genes - encode netrin, ATPase binding  
PT cassette transporter, ribosomal L3 sub-type or augmentor of liver  
PT regeneration.  
XX PS Claim 72; Page 66; 98pp; English.  
XX CC The sequences given in AAT85489-90 are oligos which hybridise under  
CC stringent conditions to the cDNA encoding the human augmentor of liver  
CC regeneration protein (hALR). The hALR genomic sequence was isolated from  
CC human chromosome 16 by exon trapping. hALR cDNA encodes a 119 amino acid  
CC protein which is 84.8% identical and 94.1% similar to the rat ALR  
CC protein. The hALR gene is specifically isolated from the chromosome  
CC region 16p13.3  
XX SQ Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.4; DB 1; Length 20;  
Best Local Similarity 93.8%; Pred. No. 6.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
XX QY 1657 CACACCCCTCACAGGG 1672  
XX DB 20 CACACTCTCACAGG 5  
RESULT 579  
AAT92765  
ID AAT92765 standard; DNA; 20 BP.  
XX AC AAT92765;  
XX DT 05-FEB-1998 (first entry)  
XX DE Primer #2 for immunoglobulin kappa variable region Vkappa1-2.  
XX KW PCR primer; amplify; human gene; chimeric non-human animal; antibody;  
KW transgenic mouse; chromosome fragment; hybridoma production; microcell;  
KW Huntington's disease gene; pluripotent cell; interleukin-2 gene;  
KW myeloma cell; immunoglobulin; variable region; ss.  
XX OS Synthetic.  
XX OS Homo sapiens.  
XX PN WO9707671-A1.  
XX PD 06-MAR-1997.  
XX PF 29-AUG-1996; 96WO-JP002427.  
XX PR 29-AUG-1995; 95JP-00242340.  
XX PR 15-FEB-1996; 96JP-00027940.  
XX PA (KIRI ) KIRIN BEER KK.  
XX PI Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I;  
XX DR WPI; 1997-178822/16.  
XX PT Chimeric animal containing foreign chromosome - for expression of a

foreign gene, e.g. an antibody.  
 Example 1; Page 21; 142pp; Japanese.  
 AAT92758-792817 represent amplification primers for human genes which are used in the chimeric non-human animal of the invention. The chimeric non-human animal of the invention, preferably a mouse, contains a foreign chromosome(s) or chromosome fragment. The animal is produced by obtaining a hybrid cell by fusion of a cell containing the foreign chromosome with a cell having the ability to form microcells. The microcells are prepared, and fused with cells having differentiative pluripotency to form cells having differentiative pluripotency and containing the foreign chromosome. These cells are then introduced into an embryo, which is then implanted and brought to term. The foreign chromosome segment is at least 1 Mb long and preferably contains a region for an antibody. The chromosome segment could also contain genes associated with human disease, such as the interleukin-2 gene, and the Huntington's disease gene. The expression of foreign genes (especially human genes) in a non-human animal is useful for efficient production of proteins, especially of human antibodies. Particular cells of the chimeric animal which express the foreign genetic material can be isolated and fused with myeloma cells to produce hybridomas capable of expressing the foreign gene (e.g. to produce the antibody)

Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.4; DB 1; Length 20;  
 Best Local Similarity 93.8%; Pred. No. 6.7e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 356 CTGATGGGAGAGTGA 371  
 DB 5 CTGATGGTGAAGTGA 20

RESULT 580  
 AAX10122/c  
 ID AAX10122 standard; DNA; 20 BP.  
 AC AAX10122;  
 DT 24-MAR-1999 (first entry)  
 DE Human biallelic polymorphic marker downstream primer #428.  
 KW Polymorphism; biallelic; human; forensic; paternity testing; disease; detection; phenotypic typing; characteristic; infection; hereditary; autoimmune disease; cancer; inflammation; drug; therapy; medicament; treatment; marker; primer; ss.  
 OS Synthetic.  
 OS Homo sapiens.  
 PN WO9820165-A2.  
 PD 14-MAY-1998.  
 PF 05-NOV-1997; 97WO-US020313.  
 PR 06-NOV-1996; 96US-0030455P.  
 XX (WHEAT) WHITEHEAD INST BIOMEDICAL RES.  
 XX Lander ES, Wang D, Hudson T;  
 XX WPI; 1998-286974/25.  
 XX New isolated nucleic acid segments from the human genome - used for determining polymorphic forms for use in e.g. forensics, paternity testing or phenotypic typing for disease.  
 XX Claim 16; Page 202; 310pp; English.

AAX09121-X10268 are allele-specific oligonucleotide primers used in the isolation of various biallelic polymorphic markers found in the human genome (represented in AAX10269-X12937). These primers can be used in a method for determining polymorphic forms in an individual for use in e.g. forensics, paternity testing or for phenotypic typing for diseases such as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial hypercholesterolemia, polycystic kidney disease, hereditary spherocytosis, von Willebrand's disease, tuberculous sclerosis, Ehlers-Danlos syndrome, osteogenesis imperfecta, acute intermittent porphyria, autoimmune diseases, inflammation, cancer, diseases of the nervous system, infection by pathogenic microorganisms, and characteristics such as longevity, appearance (e.g. baldness, obesity), strength, speed, endurance, fertility, and susceptibility or receptivity to particular drugs or therapeutic treatments. The isolated polymorphic nucleic acid segments can also be used to produce medicaments for the treatment or prophylaxis of such diseases

Sequence 20 BP; 3 A; 5 C; 3 G; 9 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.4; DB 1; Length 20;  
 Best Local Similarity 93.8%; Pred. No. 6.7e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 665 AAGCGAAAGCAGCT 680  
 DB 20 AAGCGAAAGCAGAT 5

RESULT 581  
 AAV16342/c  
 ID AAV16342 standard; DNA; 20 BP.  
 AC AAV16342;  
 DT 03-JUN-1998 (first entry)  
 DE 3' RACE internal PCR primer used to clone the human ALR gene.  
 KW Human; augmentor of liver regeneration; hAlR; treatment; modulation; expression; antibody; identification; binding; substrate specificity; ligand; exon trap; damaged liver; treatment; PCR primer; amplify; ss.  
 OS Synthetic.  
 OS Homo sapiens.  
 PN WO9748797-Al.  
 PD 24-DEC-1997.  
 PF 16-JAN-1997; 97WO-US000785.  
 PR 17-JUN-1996; 96US-00665259.  
 PR 01-OCT-1996; 96US-00720614.  
 PR 09-DEC-1996; 96US-00762500.  
 XX (GENZ) GENZYME CORP.  
 XX Landes GM, Burn TC, Connors TD, Dackowski WR, Van Raay TJ;  
 XX Klinger KW;  
 XX WPI; 1998-063138/06.  
 XX Human chromosome 16 genes encoding netrin, ATP binding cassette transporter, ribosomal L3 and augmentor of liver regeneration proteins - useful for, e.g. treatment of liver disease and cystic fibrosis.  
 XX Claim 80; Page 69; 220pp; English.  
 XX Oligonucleotides AAV16341-42 are used to clone the human augmentor of liver regeneration (hAlR) gene (see AAV16309). ALR is a growth factor which augments the growth of damaged liver tissue while having no effect

CC on the resting liver. Rat ALR has been shown to be capable of augmenting  
CC hepatocytic regeneration following hepatectomy. The antisense  
CC oligonucleotides of the present sequence are used to modulate expression  
CC of hALR and prevent its translation. Antibodies against hALR can be used  
CC to block binding of its naturally occurring ligands. Host cells  
CC containing vectors with DNA inserts encoding the protein can be used in a  
CC method for identifying compounds which bind to hALR. hALR could be used  
CC in the treatment of damaged liver

XX SQ Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.4; DB 1; Length 20;  
Best Local Similarity 93.8%; Pred. No. 6.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1657 CACACCCCTCACAGG 1672  
Dd 20 CACACTCTCACAGG 5

RESULT 582  
AAV29622  
ID AAV29622 standard; DNA; 20 BP.  
XX AC AAV29622;  
XX DT 19-AUG-1998 (first entry)  
XX DE Human EP3 receptor cDNA amplifying primer 1.  
XX KW Prostaglandin E2 receptor; EP3-V receptor; human; treatment;  
XX KW inflammation; EP3-VI; PCR primer; ss.  
XX OS Synthetic.  
XX OS Homo sapiens.

XX PN JP10113185-A.  
XX PD 06-MAY-1998.  
XX PF 14-OCT-1996; 96JP-00291150.  
XX PR 14-OCT-1996; 96JP-00291150.  
XX PA (ONOY ) ONO PHARM CO LTD.  
XX DR WPI; 1998-315474/28.  
XX PT New human prostaglandin EP3 receptor(s) - useful for treatment and  
XX PT prevention of, e.g. inflammation.  
XX PS Example; Page 7; 27pp; Japanese.

XX CC This primer is used for the PCR amplification of the human EP3-V and EP3-  
XX VI receptor cDNA sequences. A replication or expression vector comprising  
XX cDNA sequences encoding EP-3V or EP3-3VI can be used to transform a host  
XX cell. The host cell is cultured and the polypeptides can be recovered  
XX from the culture medium. The polypeptides combine specifically with a  
XX prostaglandin PGE2 receptor and can be used as a preventive and treating  
XX agent for inflammation

XX SQ Sequence 20 BP; 5 A; 2 C; 10 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.4; DB 1; Length 20;  
Best Local Similarity 93.8%; Pred. No. 6.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 347 AGATGGGGCTGTGATGG 362  
Dd 2 AGATGGGGCTGTGATGG 17

RESULT 583

AAV52762  
ID AAV52762 standard; DNA; 20 BP.  
XX AC AAV52762;  
XX DT 27-NOV-1998 (first entry)  
XX DE Immunoglobulin kappa variable PCR primer Vkl-2 #2.

XX KW Pluripotent cell; intrinsic gene; chimeric non-human animal;  
XX KW construction; human; antibiotic gene; cancer cell; embryonic; PCR primer;  
XX OS ss.  
XX OS Synthetic.  
XX OS Homo sapiens.

XX PN W09837757-A1.  
XX PD 03-SEP-1998.  
XX PF 02-MAR-1998; 98WO-JP000860.  
XX PR 28-FEB-1997; 97JP-00062309.  
XX PA (KIRI ) KIRIN BEER KK.  
XX PT Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I;  
XX PT WPI; 1998-480821/41.  
XX PS Pluripotent cells containing foreign chromosomes or fragments - and non-  
XX PT human chimeric animals constructed using them and expressing foreign  
XX PT genes such as human antibiotic genes.

XX Example 1; Page 34; 217pp; Japanese.  
XX CC The present invention describes a method of obtaining pluripotent cells  
XX CC containing foreign chromosomes or their fragments (preferably at least  
XX CC 570 Kb in length, especially more than 1000 Kb) by preparing cancerous  
XX CC cells containing the foreign chromosomes or fragments, then fusing these  
XX CC with pluripotent cells such as embryonic stem cells, embryonic  
XX CC reproductive cells, embryonic cancer cells or their mutants. Also  
XX CC described are: (1) a method of obtaining hybridoma cells by fusing a cell  
XX CC with a high ability to produce hybridoma cells (such as mouse A9 cells)  
XX CC with a cell containing the foreign chromosomes or fragments (such as  
XX CC normal human diploid cells); (2) a method of utilising pluripotent cells  
XX CC to produce chimeric and transgenic non-human animals (especially mammals  
XX CC such as mice) which can express the foreign chromosomes or fragments  
XX CC introduced; and (3) chimeric animals, their offspring and tissues and  
XX CC cells derived from the offspring produced by a method as in (2). The  
XX CC inventions can be used for the production of monoclonal antibodies for  
XX CC medical use which are of human type and therefore not antigenic in  
XX CC humans. They can also be used in the production of chimeric and  
XX CC transgenic animals which express useful foreign proteins, or which can  
XX CC serve as models for the study of human diseases. AAV52755 to AAV52828 are  
XX CC PCR primers used in examples from the present invention

XX SQ Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.4; DB 1; Length 20;  
Best Local Similarity 93.8%; Pred. No. 6.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 356 CTGATGGGAGAGTGA 371  
Dd 5 CTGATGGTGTGAGTGA 20

RESULT 584  
AAV29918/C  
ID AAV29918 standard; DNA; 20 BP.  
XX AC AAV29918;

XX 06-JUL-1999 (first entry)  
XX Primer 1192-1161 for PDZ domain-containing protein genes.  
XX PDZ domain; gene expression; human umbilical vascular endothelial cell;  
XX HUVEC; stimulation; tumour necrosis factor; TNF; protein binding; PCR;  
XX cell; proliferation disorder; cancer; primer; amplification; ss.  
XX Synthetic.  
XX Homo sapiens.  
XX WO9907846-A1.  
XX 18-FEB-1999.  
XX 12-AUG-1998; 98WO-JP003603.  
XX 12-AUG-1997; 97JP-00230356.  
XX 19-JUN-1998; 98JP-00189944.  
XX (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.  
XX Funahashi S, Miyata S;  
XX WPI; 1999-167423/14.  
XX Protein containing PDZ domain, whose expression is enhanced by TNF  
XX stimulation - plays an important role in protein/protein interactions and  
XX is used for screening for proteins for use in treatment of cell  
XX proliferation disorders such as cancer.  
XX Example 2; Page 29; 240pp; Japanese.  
XX This sequence represents a primer used to amplify and isolate clones which  
XX encode new proteins containing PDZ domains whose expression in human  
XX umbilical vascular endothelial cells (HUVEC) are enhanced by stimulation  
XX with tumour necrosis factor (TNF) alpha. The new protein is used to  
XX identify proteins which bind to it (particularly to the PDZ domains) and  
XX the genes encoding them, for use in the treatment of cell proliferation  
XX disorders such as cancer  
XX Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.4; DB 1; Length 20;  
Best Local Similarity 93.8%; Pred. No. 6.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 880 GACTGTGGGACATCA 895  
DB 18 GACTGTGGGACCATCA 3  
RESULT 585  
AAAX29949/c  
XX AAX29949 standard; DNA; 20 BP.  
XX AAX29949;  
XX 06-JUL-1999 (first entry)  
XX Primer 1192-1161 for PDZ domain-containing protein gene clone 32-8-1/5R3.  
XX PDZ domain; gene expression; human umbilical vascular endothelial cell;  
XX HUVEC; stimulation; tumour necrosis factor; TNF; protein binding; PCR;  
XX cell; proliferation disorder; cancer; primer; amplification; ss.  
XX Synthetic.  
XX Homo sapiens.  
XX WO9907846-A1.  
XX 18-FEB-1999.

XX 12-AUG-1998; 98WO-JP003603.  
XX 12-AUG-1997; 97JP-00230356.  
XX 19-JUN-1998; 98JP-00189944.  
XX (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.  
XX Funahashi S, Miyata S;  
XX WPI; 1999-167423/14.  
XX Protein containing PDZ domain, whose expression is enhanced by TNF  
XX stimulation - plays an important role in protein/protein interactions and  
XX is used for screening for proteins for use in treatment of cell  
XX proliferation disorders such as cancer.  
XX Example 2; Page 31; 240pp; Japanese.  
XX This sequence represents a primer used to isolate the clone 32-8-1/5R3  
XX which encodes a new protein containing PDZ domains whose expression in  
XX human umbilical vascular endothelial cells (HUVEC) is enhanced by  
XX stimulation with tumour necrosis factor (TNF) alpha. The new protein is  
XX used to identify proteins which bind to it (particularly to the PDZ  
XX domains) and the genes encoding them, for use in the treatment of cell  
XX proliferation disorders such as cancer  
XX Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.4; DB 1; Length 20;  
Best Local Similarity 93.8%; Pred. No. 6.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 880 GACTGTGGGACATCA 895  
DB 18 GACTGTGGGACCATCA 3  
RESULT 586  
AAAX79747/c  
XX AAA79747 standard; DNA; 20 BP.  
XX AAA79747;  
XX 20-NOV-2000 (first entry)  
XX Hepatitis B virus related oligonucleotide probe #10.  
XX Hepatitis B virus; HBV; Hepatitis A virus; HAV; probe; detection;  
XX mutation; high-density gene chip; ss.  
XX Hepatitis B virus.  
XX CN1252452-A.  
XX 10-MAY-2000.  
XX 24-SEP-1999; 99CN-00114460.  
XX 24-SEP-1999; 99CN-00114460.  
XX (UYDO-) UNIV DONGVAN.  
XX Sun X, Lu Z, Wang Y;  
XX WPI; 2000-443233/39.  
XX High-density gene chip making process.  
XX Example 1; Fig 15; 19pp; Chinese.  
XX The present invention describes a method which comprises making a high-  
XX density gene chip, specifically for making high-density micro-array of

CC oligonucleotide probes. An oligonucleotide probe selecting process to  
CC seek preferentially length variable and coverage variable probes is  
CC provided to ensure identical cross melting temperature of probes to the  
CC maximum limit, and this can make the cross control of gene chip  
CC relatively simple and raise the reliability of the gene chip detecting  
CC results. The process proposes a specific probe selection method for  
CC detecting target sequence directly, detecting mutation in both specific  
CC and non-specific sites and a probe overall arrangement scheme. AAA79738  
CC to AAA80201 represent oligonucleotide probe sequences which are used in  
CC examples from the present invention

XX  
SQ Sequence 20 BP; 8 A; 1 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;  
Best Local Similarity 93.8%; Pred. No. 6.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 828 CCTCACCCCTGTCCTT 843  
Db 18 CCTAACCCCTGTCCTT 3

RESULT 587  
AAA09925  
ID AAA09925 standard; DNA; 20 BP.

XX  
AC AAA09925;  
XX  
DT 05-JUL-2000 (first entry)

DE Primer 2 for human immunoglobulin kappa variable region gene VK1-2.

XX Foreign chromosome; microcell fusion; homologous recombination; antibody;  
KW targeting vector; transgenic animal; disease model; knockout animal;  
KW PCR primer; human; ss.

XX Homo sapiens.

XX WO200010383-A1.

XX 02-MAR-2000.

XX 23-AUG-1999; 99WO-JP004518.

XX 21-AUG-1998; 98JP-00236169.

XX (KIRI ) KIRIN BEER KK.

XX Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I;  
PI Kuroiwa Y;

XX WPI; 2000-246479/21.

XX Producing a cell containing modified foreign chromosomes, useful for the  
PT generation of transgenic animals.

XX Example 1; Page 55; 316pp; Japanese.

XX The invention relates to a novel method of producing cells containing a  
CC modified foreign chromosome or chromosome fragment. The method comprises:  
CC (a) fusing a microcell comprising the foreign chromosome or chromosome  
CC fragment, with a cell having a high efficiency for homologous  
CC recombination; (b) marking the desired site of insertion of the foreign  
CC chromosome using a targeting vector; and (c) inducing deletion or  
CC translocation at the marked site. Transgenic animals produced by the  
CC method are useful to provide disease models and knockout animals, and in  
CC the production of human proteins, particularly human antibodies. This  
CC sequence is used in the method of the invention

XX Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;  
Best Local Similarity 93.8%; Pred. No. 6.7e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 356 CTGATGGGGAGAGTGA 371  
Db 5 CTGATGGTGAGAGTGA 20

RESULT 588  
AAC67141/c  
ID AAC67141 standard; DNA; 20 BP.

XX  
AC AAC67141;

DT 03-APR-2001 (first entry)

DE Human E2F transcription factor 3 mRNA antisense sequence SEQ ID NO: 14.

XX Human; E2F transcription factor 3; antisense; E2F-3; cancer;  
KW phosphorothioate backbone; infection; inflammation; PCR primer; ss.

XX Homo sapiens.

XX US6165791-A.

XX 26-DEC-2000.

XX 24-FEB-2000; 2000US-00513729.

XX 24-FEB-2000; 2000US-00513729.

XX (ISIS-) ISIS PHARM INC.

XX Popoff I, Wyatt J;

XX WPI; 2001-101698/11.

XX Novel antisense compounds targeted to E2F transcription factor 3 for  
PT diagnosis, prophylaxis and treatment of diseases associated with E2F  
PT transcription factor 3 such as infection, inflammation or tumor  
PT formation.

XX Claim 14; Col 41-42; 41pp; English.

XX The present invention provides antisense oligonucleotides with  
CC phosphorothioate backbones directed at the human E2F transcription factor  
CC 3 (E2F-3) coding sequences. These can be used in the therapy of diseases  
CC which can be treated by modulating E2F-3 expression and to prevent  
CC infection, inflammation and tumour formation

XX Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;  
Best Local Similarity 93.8%; Pred. No. 6.7e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 862 CTGAGACGAGTACCTGG 877  
Db 16 CTGAGACGAGTACCTGG 1

RESULT 589  
AAF58946/c  
ID AAF58946 standard; DNA; 20 BP.

XX AAF58946;

DT 06-JUN-2001 (first entry)

DE V parahaemolyticus detection probe SEQ ID NO: 6.

XX Escherichia coli; Vibrio parahaemolyticus; Staphylococcus aureus;  
KW food poisoning; probe; ss.

```

OS Vibrio parahaemolyticus.
XX
XX
XX PN EP1085100-A1.
XX
XX PD 21-MAR-2001.
XX
XX PF 20-AUG-1992; 2000EP-00125531.
XX
XX PR 18-FEB-1992; 92JP-00030755.
XX PR 24-MAR-1992; 92JP-00066082.
XX PR 20-AUG-1992; 92EP-00307606.
XX
XX PA (SHMA ) SHIMADZU CORP.
XX
XX PI Ohashi T, Tada J, Fukushima S, Ozaki H, Nishimura N, Shirasaki Y;
PI Yamagata K;
XX WPI; 2001-246903/26.
XX
XX New oligonucleotides that are selectively hybridizable with the heat-
PT labile genes of toxigenic Escherichia coli, useful as primers for gene
PT amplification to detect E. coli in cases of food poisoning, diarrhea or
PT in food inspection.
XX
XX PS Example 2; Page 29; 122pp; English.
XX
XX The present invention provides a number of oligonucleotides which
CC selectively hybridise to either Vibrio parahaemolyticus, Escherichia coli
CC or Staphylococcus aureus genes. These organisms are associated with food
CC poisoning, and the sequences can be used to determine its cause and thus
CC determine the appropriate treatment. The present sequence is one of the
CC probes of the invention
XX
XX SQ Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 224 ATGAGAGTGGTGGTGG 239
DB 16 ATGAGAGTGGTGGTGG 1
XX
RESULT 590
AAD17411
ID AAD17411 standard; DNA; 20 BP.
XX
XX AC AAD17411;
XX
XX DT 29-NOV-2001 (first entry)
XX
XX DE Human sFRP4 gene specific reverse RT-PCR primer.
XX
XX KW Secreted Frizzled-related protein; sFRP; chronic bronchitis; asthma;
XX chronic obstructive pulmonary disease; COPD; antisense therapy; human;
XX emphysema; reverse transcription PCR; RT-PCR primer; sFRP4 gene; ss.
XX
XX OS Homo sapiens.
XX
XX PN W0200164717-A1.
XX
XX PD 07-SEP-2001.
XX
XX PF 28-FEB-2001; 2001WO-US006579.
XX
XX PR 29-FEB-2000; 2000US-00514885.
XX
XX PA (UYCO ) UNIV COLUMBIA NEW YORK.
XX
XX PI D'armiento J, Imai K;
XX WPI; 2001-557764/62.
XX

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XX
XX Inhibition of apoptosis for the treatment or prevention of obstructive
XX pulmonary disease comprises inhibiting expression of secreted Frizzled-
XX related protein gene in lung cells.
XX
XX PS Example 2; Page 35; 79pp; English.
XX
XX The present sequence is human secreted Frizzled-related protein 4 (sFRP4)
XX gene specific reverse transcription PCR (RT-PCR) primer. The invention
XX relates to a method for treating or preventing chronic obstructive
XX pulmonary disease (COPD) such as emphysema, asthma and chronic bronchitis
XX in a subject. The method involves administering to the subject, an agent
XX effective to inhibit apoptosis by inhibiting the expression of a secreted
XX Frizzled-related protein (sFRP) gene. It is also useful in antisense
XX therapy
XX
XX SQ Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 335 ACGAGGACTTGAGAGT 350
DB 2 ATGAGGACTTGAGAGT 17
XX
RESULT 591
AAF58888/c
ID AAF58888 standard; DNA; 20 BP.
XX
XX AC AAF58888;
XX
XX DT 06-JUN-2001 (first entry)
XX
XX DE V parahaemolyticus detection probe SEQ ID NO: 6.
XX
XX KW Escherichia coli; Vibrio parahaemolyticus; Staphylococcus aureus;
XX food poisoning; probe; ss.
XX
XX OS Vibrio parahaemolyticus.
XX
XX PN EP1085101-A2.
XX
XX PD 21-MAR-2001.
XX
XX PF 20-AUG-1992; 2000EP-00125532.
XX
XX PR 18-FEB-1992; 92JP-00030755.
XX PR 24-MAR-1992; 92JP-00066082.
XX PR 20-AUG-1992; 92EP-00307606.
XX
XX PA (SHMA ) SHIMADZU CORP.
XX
XX PI Ohashi T, Tada J, Fukushima S, Ozaki H, Nishimura N, Shirasaki Y;
XX Yamagata K;
XX WPI; 2001-246904/26.
XX
XX New oligonucleotides that are selectively hybridizable with the
XX thermostable enterotoxin genes of enterotoxigenic Escherichia coli,
XX useful as primers for gene amplification to selectively detect E. coli in
XX cases of food poisoning.
XX
XX PS Example 2; Page 29; 120pp; English.
XX
XX The present invention provides a number of oligonucleotides which
XX selectively hybridise to either Vibrio parahaemolyticus, Escherichia coli
XX or Staphylococcus aureus genes. These organisms are associated with food
XX poisoning, and the sequences can be used to determine its cause and thus
XX determine the appropriate treatment. The present sequence is one of the
XX probes of the invention
XX

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SQ Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 224 ATGAGAGTGGTGGTGG 239
DB 16 ATGAGAGTGGTAGTGG 1

RESULT 592
AAH22485
XX AAH22485 standard; DNA; 20 BP.
AC AAH22485;
XX
XX
DT 22-AUG-2001 (first entry)
DE Rice promoter specific primer SR15.
XX
XX Transplastome; plastome; plastid; chloroplast; transgene; plant;
KW psbA gene; PCR primer; ss.
XX
XX Oryza sativa.
OS
XX WO200142441-A2.
PN 14-JUN-2001.
XX
XX 08-DEC-2000; 2000WO-EP012446.
PF
XX 08-DEC-1999; 99GB-00029075.
PR 14-JUL-2000; 2000GB-00017369.
XX
XX (ITGE-) INT CENT GENETIC ENG & BIOTECHNOLOGY.
PA
XX Reddy S, Sadhu L, Shukla V, Ferraiolo G;
PI WPI; 2001-381671/40.
XX
XX
XX Obtaining a stable transplastome for producing a transplastomic cell,
PT plant or seed, comprises transforming a recipient plastome with a
PT polynucleotide comprising a 5' and 3' sequence homologous to the
PT recipient.
XX
XX Example 8; Page 113; 128pp; English.
XX
XX The invention relates to a method of obtaining a stable transplastome, by
CC transforming a recipient plastome (RP) with a polynucleotide having a 5'
CC sequence homologous to a region of RP, and joined to it, a sequence
CC heterologous to RP comprising a coding region operably linked to
CC regulatory region capable of securing expression of coding region in the
CC plastid and joined to it, and a 3' sequence homologous to a region of RP.
CC The method is useful for obtaining a transplastomic plastid, by
CC transforming a plastome within a plastid such as proplastid, amyloplast,
CC chromoplast, etioplast or leucoplast, preferably chloroplast. The method
CC is useful for obtaining a transplastomically expressed protein. The
CC method provides high, uniform, reliable expression of transgenes in
CC plants, with stable inheritance of the trait by avoiding the potential
CC for the dangerous spread of transgene to the ecosystem. The present
CC sequence represents a PCR primer used in primer extension assays for
CC analysis of transcription initiation from rice promoters in tobacco
CC chloroplasts
XX
XX Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1186 ATGCCACAGCGCGTC 1201
DB 16 ATGAGAGTGGTAGTGG 1
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Db 1 ATGCCACAGCGCGTC 16

RESULT 593
AAC92716
ID AAC92716 standard; DNA; 20 BP.
XX
XX AAC92716;
XX
XX 27-MAR-2001 (first entry)
XX
XX Human Nck-2 phosphorothioate antisense oligonucleotide, SEQ ID NO:77.
DE
XX
XX Human Nck-2; adapter protein; Nck adapter protein; hNck-beta; Grb4;
KW signal transduction; SH2 domain; SH3 domain; src homology domain;
KW integrin signalling; receptor tyrosine kinase signalling;
KW growth factor receptor signalling; PINCH; v-Abl; Ras; Sos;
KW transcriptional activation; cancer; tumour; leukaemia; breast cancer;
KW expression inhibition; phosphorothioate; antisense oligonucleotide; ss.
XX
XX Homo sapiens.
OS
XX US6165728-A.
FN
XX
XX 26-DEC-2000.
PD
XX
XX 19-NOV-1999; 99US-00444053.
PF
XX 19-NOV-1999; 99US-00444053.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Ward DT, Cowseert LM;
PI
XX WPI; 2001-090480/10.
DR
XX
XX Novel antisense compound which inhibits expression of human nck-2 useful
PT for treating disease or condition associated with expression of nck-2,
PT and as research reagents, kits and diagnostics.
XX
XX Claim 1; Col 41-42; 38pp; English.
XX
XX Sequences AAC92649-C92728 represent antisense oligonucleotides targeted
CC to the human Nck-2 gene, which inhibit its expression. The antisense
CC oligonucleotides were designed to target different regions of the human
CC Nck-2 mRNA, and were analysed for their effect on Nck-2 mRNA levels by
CC quantitative real-time PCR. Nck-2 (also known as Nck adapter protein,
CC hNck-beta and Grb4), contains both SH2 and SH3 src homology domains and
CC functions as an adapter protein in integrin-mediated and receptor
CC tyrosine kinase-mediated signal transduction, particularly in growth
CC factor receptor signalling. Moreover, Nck-2 participates in pathways that
CC connect growth factor receptor signalling and integrin signalling via its
CC interaction with PINCH, a LIM domain-containing adapter protein which is
CC involved in integrin, growth factor and Wnt signalling pathways. Nck-2
CC also interacts with EGF (epidermal growth factor) and PDGF (platelet-
CC derived growth factor) receptors inhibiting EGF- and PDGF-stimulated DNA
CC synthesis in an SH2-dependent manner. Nck-2 is also able to interact with
CC v-Abl, Ras and Sos proteins to induce transcriptional activation, and is
CC therefore implicated in the development of cancer, particularly leukaemia
CC and breast cancer. The oligonucleotides of the invention are useful for
CC diagnosis, prevention and treatment of conditions associated with Nck-2
CC expression, such as leukaemia and breast cancer
XX
XX Sequence 20 BP; 5 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 815 ACACGGAGAGTCCCT 830
DB 4 ACACGGAGAGTCCCT 19
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RESULT 594
ID AAF79782/C
XX AAF79782 standard; DNA; 20 BP.
XX
AC AAF79782;
XX
DT 29-MAY-2001 (first entry)
XX
DE V parahaemolyticus gene specific probe SEQ ID NO: 6.
XX
XX Vibrio parahaemolyticus; Escherichia coli; Staphylococcus aureus;
KW food poisoning; selective probe; ss.
XX
OS Vibrio parahaemolyticus.
XX
PN EP1085099-A2.
XX
PD 21-MAR-2001.
XX
PF 20-AUG-1992; 2000EP-00125530.
XX
PR 18-FEB-1992; 92JP-00030755.
PR 24-MAR-1992; 92JP-00066082.
PR 20-AUG-1992; 92EP-00307606.
XX
PA (SHMA ) SHIMADZU CORP.
XX
PI Ohashi T, Tada J, Fukushima S, Ozaki H, Nishimura N, Shirasaki Y;
PI Yamagata K;
XX
DR WPI; 2001-259596/27.
XX
PT New oligonucleotides that are selectively hybridizable with the entA, B,
PT C, D or E gene of Staphylococcus aureus, useful as primers for gene
PT amplification to selectively detect S. aureus in cases of food poisoning
PT or in food inspection.
XX
PS Example 2; Page 29; 121pp; English.
XX
CC The present invention provides the sequences of a number of
CC oligonucleotides which selectively hybridise to the Staphylococcus aureus
CC enterotoxin A, B, C, D or E genes. Also provided are the sequences of
CC probes for Escherichia coli and Vibrio parahaemolyticus genes. These are
CC useful in the identification of the cause of food poisoning in humans,
CC and in food inspection procedures
XX
SQ Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 224 ATGAGAGTGGTGTGG 239
DB 16 ATGAGAGTGGTAGTGG 1

RESULT 595
ABA81723
ID ABA81723 standard; DNA; 20 BP.
XX
XX ABA81723;
AC
AC ABA81723;
DT 25-JAN-2002 (first entry)
XX
XX PCR primer KP139.
DE
XX Aldehyde-dehydrogenase; enzyme; phenanthrene; anthracene; PCR primer;
KW aromatic dihydrodiol dehydrogenase; aromatic diol oxygenase;
KW hydratase-aldoase; ss.
XX
XX Nocardioideis sp. KP7.
OS

XX JP2001245662-A.
XX
XX 11-SEP-2001.
XX
XX 03-MAR-2000; 2000JP-00059523.
XX
XX 03-MAR-2000; 2000JP-00059523.
XX
XX (KAIY-) KAIYO BIOTECHNOLOGY KENKYUSHO KK.
XX
XX WPI; 2002-002935/01.
XX
XX Genes and proteins involved in the upstream of the pathway of degradation
XX of a polycyclic aromatic compound.
XX
XX Example 4; Page 7; 47pp; Japanese.
XX
XX The present invention relates to coding sequences for proteins such as
XX aromatic dihydrodiol dehydrogenase, aromatic diol oxygenase, hydratase-
XX aldoase and aldehyde-dehydrogenase (ABA01198-ABA01201 and AAM52344-
XX AAM52347), which are involved in the degradation of polycyclic aromatic
XX compounds. The enzymes are useful as reagents for converting the
XX metabolite intermediates of polycyclic aromatic compounds such as
XX phenanthrene and anthracene. The present sequence is a PCR primer, which
XX was used in an example from the present invention
XX
SQ Sequence 20 BP; 1 A; 9 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 921 CCTGTTCAGCTGCTC 936
DB 1 CCTGTTCAGCTGCTC 16

RESULT 596
AAD29525
ID AAD29525 standard; DNA; 20 BP.
XX
XX AAD29525;
AC
XX AAD29525;
DT 07-MAY-2002 (first entry)
XX
XX Primer #13 related to the method of producing a desired protein.
DE
XX Transgenic plant; transplastomic plant; medicament; primer; ss.
XX
XX Unidentified.
OS
XX WO200206497-A2.
PN
XX 24-JAN-2002.
PD
XX 13-JUL-2001; 2001WO-EP008132.
PF
XX 14-JUL-2000; 2000GB-00017397.
XX
XX (ITGE-) INT CENT GENETIC ENG & BIOTECHNOLOGY.
PA
XX Reddy VS, Sadhu L;
PI
XX WPI; 2002-171810/22.
DR
XX Producing a protein of interest, e.g., a pharmaceutically active protein,
XX comprises expressing a polynucleotide fusion construct in a plasmid and
XX producing a fusion protein comprising the protein of interest.
XX
XX Disclosure; Page 75; 92pp; English.
XX
XX The patent discloses a method of producing a protein of interest which

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CC involves expressing a polynucleotide fusion construct in a plasmid to  
CC produce a fusion protein comprising the protein of interest where the  
CC construct comprises a polynucleotide coding sequence of the protein of  
CC interest operably linked to a polynucleotide coding sequence of a fusion  
CC protein partner. The methods of the invention are useful for producing a  
CC protein of interest which comprises a human protein or its biologically  
CC active variant or fragment, a pharmaceutically active protein, an IFN-  
CC (interferon), its biologically active variant or fragment, a human IFN-  
CC gamma or its biologically active variant or fragment. They are useful for  
CC the production of transgenic plants. Methods of the invention are also  
CC useful for the generation of transplasmic plant cells, plants and  
CC seeds. The protein of interest obtained by the methods of the invention  
CC is useful for the manufacture of a medicament for treating a disease  
CC condition. The present DNA sequence is a primer related to the method of  
CC producing a protein of interest

XX SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;  
Best Local Similarity 93.8%; Pred. No. 6.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1186 ATGCCACAGCGCGTC 1201  
Db 1 ATGCCACAGCGCGTC 16  
|||||

## RESULT 597

ABZ31353  
ID ABZ31353 standard; DNA; 20 BP.

AC ABZ31353;

DT 30-JAN-2003 (first entry)

DE Candida albicans GRACE strain PCR primer SEQ ID NO 5572.

KW Fungus; yeast; tetracycline; promoter; GRACE strain; biosynthesis;  
KW signal transduction; DNA replication; cell division; growth;  
KW proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.  
XX Candida albicans.

XX WO200253728-A2.

XX 11-JUL-2002.

XX 26-DEC-2001; 2001WO-US049486.

XX 29-DEC-2000; 2000US-0259128P.

XX 20-FEB-2001; 2001US-00792024.

XX 22-AUG-2001; 2001US-0314050P.

XX (ELIT-) ELITRA PHARM INC.

XX Roemer T, Jiang B, Boone C, Bussey H, Ohlsen KL;

XX WPI; 2002-566694/60.

XX Constructing strains for identifying gene products as effective targets  
XX for therapeutic intervention, by inactivating in the strain one allele of  
XX a gene and placing other allele of the gene under conditional expression.

XX Claim 36; SEQ ID NO 5572; 167bp + Sequence Listing; English.

XX The invention relates to constructing (M1) a strain of diploid fungal  
XX cells in which both alleles of a gene are modified, comprising modifying  
XX one allele by insertion or replacement by a cassette having an  
XX expressible selectable marker and modifying other allele by  
XX recombination, of a promoter replacement fragment with a heterologous  
XX promoter, so that expression of the second allele is regulated by the  
XX promoter. (M1) is useful for constructing a strain of diploid fungal  
XX cells in which both alleles of a gene are modified. The diploid fungal

CC cells having both alleles modified are useful for identifying a gene that  
CC is essential to the survival or growth of a fungus, a gene that  
CC contributes to the virulence and/or pathogenicity of a fungus, a gene  
CC that contributes to the resistance of a diploid fungus to an antifungal  
CC agent, an antifungal agent that inhibits the growth of a diploid fungus  
CC and for identifying a therapeutic agent for treatment of a mammalian  
CC disease. (M1) is useful for identifying a compound which modulates the  
CC activity of a gene product, preferably enzymatic activity, carbon  
CC compound catabolism, biosynthetic, transporter, transcriptional,  
CC translational, signal transduction, DNA replication and cell division  
CC activity. The method is useful for identifying a compound having the  
CC ability to inhibit growth or proliferation of C. albicans cells and for  
CC treating infection by C. albicans. The present sequence is that of a PCR  
CC primer used in the method of the invention. Note: The sequence data for  
CC this patent is not represented in the printed specification but is based  
CC on sequence information supplied to Derwent by the European Patent Office

XX SQ Sequence 20 BP; 1 A; 1 C; 11 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;  
Best Local Similarity 93.8%; Pred. No. 6.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 230 GTGGTGGTGGCGG 245  
Db 4 GTGGTGGTGGTGG 19  
|||||

## RESULT 598

ABS73431/C  
ID ABS73431 standard; DNA; 20 BP.

AC ABS73431;

DT 03-DEC-2002 (first entry)

DE Chimeric phosphorotioate oligonucleotide #12.

KW Human; glioma-associated oncogene-2; antisense compound; infection;  
KW inflammation; tumour formation; antiinflammatory; antitumour;  
KW inhibitor of human glioma-associated oncogene-2 expression;  
KW antisense gene therapy; phosphorothioate; ss.

XX Homo sapiens.

XX Synthetic.

XX Chimeric.

XX US6440739-B1.

XX 27-AUG-2002.

XX 17-JUL-2001; 2001US-00907843.

XX 17-JUL-2001; 2001US-00907843.

XX (ISIS-) ISIS PHARM INC.

XX Bennett CF, Freier SM;

XX WPI; 2002-697096/75.

XX Novel antisense compound that hybridizes and inhibits nucleic acid  
XX encoding human glioma-associated oncogene-2, useful for treatment of  
XX diseases associated with human glioma-associated oncogene-2.

XX Example 15; Col 45; 43pp; English.

XX The present invention relates to a new antisense compound targeted to  
XX human glioma-associated oncogene-2. The invention is useful for  
XX inhibiting the expression of human glioma-associated oncogene-2 in cells  
XX or tissues. The invention is also useful for treatment of diseases  
XX associated with human glioma-associated oncogene-2. The invention is  
XX further useful for diagnostics, therapeutics, prophylaxis, as research



CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 20 BP; 10 A; 2 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;  
Best Local Similarity 93.8%; Pred. No. 6.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 133 ATGAAGAAGATCAAAAC 148  
|||||  
Db 2 ATGAAGTAGATCAAAAC 17

RESULT 601  
ABZ87510/C  
ID ABZ87510 standard; DNA; 20 BP.

XX AC ABZ87510;

DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX PS Disclosure; SEQ ID NO 2752; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;  
Best Local Similarity 93.8%; Pred. No. 6.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 713 GACTGGAACATGAAGA 728  
|||||  
Db 16 GGCTGGAACATGAAGA 1

RESULT 602  
ABZ85016/C

ID ABZ85016 standard; DNA; 20 BP.

XX AC ABZ85016;

DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX PS Claim 15; SEQ ID NO 258; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 20 BP; 6 A; 3 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;  
 Best Local Similarity 93.8%; Pred. No. 6.7e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1171 TGCATCTTCTATGAGA 1186  
 |||||  
 Db 20 TGCATCTTCTATGAGA 5

## RESULT 603

ABZ77435  
 ID ABZ77435 standard; DNA; 20 BP.

XX  
 AC ABZ77435;

XX 28-MAY-2003 (first entry)

DE PCR primer used to amplify Ngn2 cDNA.

XX Immortalized cell; progenitor cell; neural progenitor cell; brain injury;  
 KW spinal cord injury; Ngn2; PCR; primer; ss.  
 XX Synthetic.

XX W02003014320-A2.

XX 20-FEB-2003.

XX 09-AUG-2002; 2002WO-US025389.

XX 10-AUG-2001; 2001US-0311626P.

XX (CORR ) CORNELL RES FOUND INC.

XX Goldman SA, Roy NS;

XX WPI; 2003-256571/25.

XX Immortalizing neural progenitor cells useful in treating injuries (e.g.  
 PT brain or spinal cord injuries), comprises providing a population of  
 PT progenitor cells and immortalizing the cells before or after they are  
 PT enriched or purified.

XX Example 5; Page 23; 55pp; English.

XX The specification describes a method of immortalizing progenitor cells,  
 CC including neural progenitor cells. The method comprises providing a  
 CC population of progenitor cells and immortalizing the population of the  
 CC progenitor cells either before or after they are enriched or purified.  
 CC The method is useful in immortalizing neural progenitor cells that may be  
 CC used in treating injuries (e.g. brain or spinal cord injuries) and other  
 CC diseases. PCR primers ABZ77435-36 were used to amplify cDNA encoding Ngn2  
 CC from immortalized cells of the invention

XX Sequence 20 BP; 5 A; 8 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;  
 Best Local Similarity 93.8%; Pred. No. 6.7e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1675 GCCCCCACTACATCT 1690  
 |||||  
 Db 4 GCCCACAACATACATCT 19

RESULT 604  
 ADC65809/c  
 ID ADC65809 standard; DNA; 20 BP.  
 XX  
 AC ADC65809;  
 XX  
 DT 18-DEC-2003 (first entry)

XX Mouse TGF-beta receptor II targeted antisense oligonucleotide #8.  
 DE mouse; antisense oligonucleotide;  
 XX transforming growth factor beta receptor II; TGF-beta receptor II;  
 KW hyperproliferative disorder; breast cancer; autoimmune disorder;  
 KW rheumatoid arthritis; 2'-O-methoxyethyl gapmer;  
 KW phosphorothioate backbone; ss; murine.

XX Mus musculus.

XX W02003000656-A2.

XX 03-JAN-2003.

XX 19-JUN-2002; 2002WO-US019665.

XX 21-JUN-2001; 2001US-00888361.

XX (ISIS-) ISIS PHARM INC.

XX Murray SF, Wyatt JR;

XX WPI; 2003-175279/17.

XX New compound having a sequence targeted to a nucleic acid encoding a  
 PT transforming growth factor beta-receptor II, useful for preparing a  
 PT composition for treating hyperproliferative disorder e.g., lung, liver,  
 PT colon or gastric cancer.

XX Claim 3; SEQ ID NO 105; 141pp; English.

XX The invention comprises antisense oligonucleotides that are targeted to  
 CC the nucleic acid encoding transforming growth factor beta (TGF-beta)  
 CC receptor II. The antisense oligonucleotides of the invention are useful  
 CC for treating hyperproliferative disorders (e.g. breast cancer), or an  
 CC autoimmune disorder (e.g. rheumatoid arthritis). The present DNA sequence  
 CC represents a 2'-O-methoxyethyl gapmer oligonucleotide with a  
 CC phosphorothioate backbone that is targeted to mouse TGF-beta receptor II.

XX Sequence 20 BP; 4 A; 10 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 20;  
 Best Local Similarity 93.8%; Pred. No. 6.7e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 930 GCTGCTCCGTGGCTG 945  
 |||||  
 Db 19 GCTGCTCCGTGGCTG 4

## RESULT 605

AAQ50630/c  
 ID AAQ50630 standard; DNA; 21 BP.

XX  
 AC AAQ50630;

XX 03-JUN-1994 (first entry)

DE NANBHV primer.

XX NANBHV; non-A non-B hepatitis virus; prophylaxis; liver; serum;  
 KW chimpanzee; clone; kit; ss.  
 XX Synthetic.

XX JP05284969-A.  
XX  
XX  
XX  
XX 02-NOV-1993.  
XX  
XX 09-APR-1992; 92JP-00088840.  
XX  
XX 09-APR-1992; 92JP-00088840.  
XX  
XX (DAUC ) DAIICHI KAGAKU YAKUHN KK.  
XX (DAUC ) DAIICHI PHARM CO LTD.  
XX  
XX WPI; 1993-382212/48.  
XX  
XX Hepatitis virus gene for corresp. polypeptide - used in treatment and  
PT prophylaxis of non-A, non-B-hepatitis, for encoding specified base  
PT aminoacid sequence.  
XX  
XX Disclosure; Page 5; 11pp; Japanese.  
XX  
XX The DNA sequences (AAQ50623-28) are obtained by extracting RNA from liver  
CC or serum of a patient or chimpanzee infected with NANBH, synthesising  
CC cDNA and detecting the gene fragment which is negative to anti-HCV  
CC antibody and cloning the fragment. The derived proteins (AAH4404-08) can  
CC be used to detect NANBH. The DNA and protein are useful in the treatment  
CC or prophylaxis of non-A, non-B hepatitis. The primers (AAQ50629-30) are  
CC used in the amplification process  
XX  
XX Sequence 21 BP; 5 A; 5 C; 5 G; 6 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 14.4; DB 1; Length 21;  
Best Local Similarity 93.8%; Pred. No. 7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 883 TGTGGGAACATCATCA 898  
DB 17 TGTGGGAACATCATCA 2

RESULT 606  
AAV57643/C  
ID AAV57643 standard; DNA; 21 BP.  
XX  
XX AAV57643;  
XX  
XX 27-NOV-1998 (first entry)  
XX  
XX Exon 5 of an ENaC subunit amplifying forward primer B-6.  
XX  
XX Epithelial sodium channel; ENaC; mutation; pathological condition;  
XX ion transport; water retention; blood pressure; metabolic acidosis;  
XX chronic respiratory disease; inflammation; human; PCR primer; ss.  
XX  
XX Synthetic.  
XX Homo sapiens.  
XX  
XX WO9840516-A1.  
XX  
XX 17-SEP-1998.  
XX  
XX 11-MAR-1998; 98WO-US004681.  
XX  
XX 11-MAR-1997; 97US-0040171P.  
XX  
XX (UYUA ) UNIV YALE.  
XX  
XX Lifton RP, Chang SS, Rossier BC;  
XX  
XX WPI; 1998-506740/43.  
XX  
XX Determination of presence of mutation conferring pathological condition  
PT mediated by altered ion transport - comprises analysing sample for  
PT presence of mutation of potassium ion channel gene, ENaC, or in its

PT encoded protein.  
XX  
XX Example 1; Page 38; 56pp; English.  
XX  
XX Sequences shown in AAV57601 to AAV57686 represent primers used for the  
CC PCR amplification of the exons of the different subunits of the human  
CC epithelial sodium channel (ENaC) gene. This is used in the method of the  
CC invention of determining the presence or absence of a mutation conferring  
CC a pathological condition mediated by altered ion transport. The method  
CC comprises analysing a nucleic acid sample, or protein sample, for the  
CC presence of a mutation in the ENaC gene, or in its encoded protein. A  
CC vector containing a nucleic acid encoding a human altered variant of the  
CC ENaC protein can be used to transform host cells to produce an altered  
CC variant of an ENaC protein. The protein can be used to identify agents  
CC that effect ion transport. The agonists can be used to treat pathological  
CC conditions resulting from abnormal ion transport, such as water  
CC retention, increased blood pressure, chronic respiratory and metabolic  
XX acidosis and inflammation  
XX  
XX Sequence 21 BP; 3 A; 14 C; 2 G; 2 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 14.4; DB 1; Length 21;  
Best Local Similarity 93.8%; Pred. No. 7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1158 GTGGGGTGTGGGCTGC 1173  
DB 17 GTGGGGTGTGGGCTGC 2

RESULT 607  
AAF96904  
ID AAF96904 standard; DNA; 21 BP.  
XX  
XX AAF96904;  
XX  
XX 06-JUN-2001 (first entry)  
XX  
XX Human gene single nucleotide polymorphism #1665.  
XX  
XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;  
XX polymorphism; vascular disease; coronary artery disease; forensics;  
XX myocardial infarction; atherosclerosis; stroke; venous thromboembolism;  
XX pulmonary embolism; paternity test; ds.  
XX  
XX Homo sapiens.  
XX  
XX Key Location/Qualifiers  
XX Variation replace(11,G)  
XX /tag= a  
XX /standard\_name= "single nucleotide polymorphism"  
XX  
XX WO200118250-A2.  
XX  
XX 15-MAR-2001.  
XX  
XX 07-SEP-2000; 2000WO-US024503.  
XX  
XX 10-SEP-1999; 99US-0153357P.  
XX 26-JUL-2000; 2000US-0220947P.  
XX 16-AUG-2000; 2000US-0225724P.  
XX  
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
XX (MILL-) MILLENNIUM PHARM INC.  
XX  
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;  
XX WPI; 2001-226749/23.  
XX  
XX Nucleic acids comprising single nucleotide polymorphisms, useful in  
PT applications such as forensics, paternity testing, medicine, genetic  
PT analysis and phenotype correlations to diseases such as diabetes and  
PT atherosclerosis.

XX Example; Page 160; 242pp; English.

XX The present invention provides a method of diagnosing a vascular disease

XX in an individual, involving determining the sequence at various

XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4

XX genes. The sequences at a number of polymorphic sites are also provided

XX in the specification. In particular, the method can be used in the

XX diagnosis of atherosclerosis, myocardial infarction, coronary heart

XX disease, stroke, peripheral vascular diseases, venous thromboembolism and

XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also

XX useful in forensics, paternity testing, genetic analysis and phenotype

XX correlations to diseases. The present sequence is an example of one of

XX the human gene SNPs shown in the specification

SQ Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 21;

Best Local Similarity 93.8%; Pred. No. 7e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 849 CCTGGACAAGGACCTG 864

|||||

DB 6 CCTGGACAAGTACCTG 21

RESULT 608

AAI73045

ID AAI73045 standard; DNA; 21 BP.

AC AAI73045;

XX 24-OCT-2002 (first entry)

DE Frosty forward primer.

XX Gene; frosty; 7 transmembrane family; GPCR64; fetal liver; placenta;

XX testes; uterus; vaccine; allergy; infection; Parkinson's disease;

XX human immunodeficiency virus; HIV-1; HIV-2; pain; cancer; diabetes;

XX obesity; anorexia; bulimia; asthma; migraine; vomiting; anxiety; PCR;

XX acute heart failure; hypotension; hypertension; urinary retention;

XX osteoporosis; angina pectoris; myocardial infarction; stroke; ulcer;

XX benign prostatic hypertrophy; Gilles de la Tourette's syndrome; priver;

XX schizophrenia; manic depression; delirium; dementia; mental retardation;

XX dyskinesia; Huntington's disease; ss.

XX Homo sapiens.

XX US2002064830-A1.

XX 30-MAY-2002.

XX 22-JUN-2001; 2001US-00887377.

XX 28-JUN-2000; 2000US-0214355P.

XX (ALIS/) ALI S.

XX (HILL/) HILL J.

XX (VAVT/) VAVTER L.

XX Ali S, Hill J, Vavter L;

XX WPI; 2002-573695/61.

XX New frosty polypeptide, a member of 7 transmembrane family of

XX polypeptides and encoding polynucleotide, useful for diagnosing and

XX treating infections, cancer, diabetes, osteoporosis, psychotic and

XX neurological disorders.

XX Example 8; Page 12; 17pp; English.

XX The sequences given in AAI73045-47 are primers and a probe which were

XX used in TaqMan analysis of frosty mRNA. Frosty is a member of the 7

CC transmembrane family of polypeptides and shows homology with GPCR64.

CC Frosty is expressed in fetal liver, placenta, testes and uterus. Frosty

CC and the corresponding cDNA are useful as vaccines. Frosty and frosty cDNA

CC are also useful in the diagnosis and treatment of human diseases

CC including allergies, infections such as bacterial, fungal, protozoan, and

CC viral infections, particularly infections caused by human

CC immunodeficiency virus (HIV)-1 or HIV-2, pain, cancer, diabetes,

CC obesity, anorexia, bulimia, asthma, Parkinson's disease, acute heart

CC failure, hypotension, hypertension, urinary retention, osteoporosis,

CC angina pectoris, myocardial infarction, stroke, ulcers, benign prostatic

CC hyper trophy, migraine, vomiting, psychotic and neurological disorders

CC including anxiety, schizophrenia, manic depression, delirium, dementia,

CC severe mental retardation and dyskinesias, such as Huntington's disease

CC or Gilles de la Tourette's syndrome. They are also useful for identifying

CC compounds that may be agonists or antagonists which are also useful in

CC therapy. Frosty is useful as an immunogen to produce antibodies

CC immunospecific for the polypeptide. The antibodies are useful to isolate

CC or to identify the clones expressing the polypeptide or to purify the

CC polypeptides by affinity chromatography. The antibodies may also be

CC employed to treat diseases. Frosty is also useful to identify membrane

CC bound or soluble receptor. Frosty cDNA is useful for creating transgenic

CC and knock-out animals, and for chromosome localization studies

XX

SQ Sequence 21 BP; 8 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 21;

Best Local Similarity 93.8%; Pred. No. 7e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 956 ACCGCGACGAAGGTGCT 971

|||||

DB 5 ACCGCGACGAAGGTGCT 20

RESULT 609

ABK65706

ID ABK65706 standard; DNA; 21 BP.

XX ABK65706;

XX 02-JUL-2002 (first entry)

XX Human single nucleotide polymorphism #326.

XX Human; single nucleotide polymorphism; SNP; sickle cell anaemia;

XX agammaglobulinaemia; diabetes insipidus; Lesch-Nyhan syndrome;

XX muscular dystrophy; Wiskott-Aldrich syndrome; Fabry's disease;

XX familial hypercholesterolaemia; polycystic kidney disease; cancer;

XX hereditary spherocytosis; Von Willebrand's disease; tubercous sclerosis;

XX Ehlers-Danlos syndrome; osteogenesis imperfecta; autoimmune disease;

XX acute intermittent porphyria; inflammation; nervous system disorder;

XX infection; rheumatoid arthritis; multiple sclerosis; diabetes;

XX systemic lupus erythematosus; Graves disease; longevity; obesity;

XX baldness; fertility; forensic; paternity testing; ss.

XX Homo sapiens.

XX OS

XX US2002037508-A1.

XX 28-MAR-2002.

XX 18-JAN-2001; 2001US-00765081.

XX 19-JAN-2000; 2000US-0176861P.

XX (CARG/) CARGILL M.

XX (IREL/) IRELAND J S.

XX (LAND/) LANDER E S.

XX Cargill M, Ireland JS, Lander ES;

XX WPI; 2002-315108/35.



XX PT Nucleic acid comprising single nucleotide polymorphisms, useful in  
 PT forensics, paternity testing and diagnosis of disease.  
 XX PS Claim 1; Page 77; 96pp; English.  
 XX CC The invention relates to a nucleic acid comprising single nucleotide  
 CC polymorphisms (SNPs) associated with diseases. The nucleic acids  
 CC comprising the SNPs and probes and primers for detecting them may be used  
 CC in assays for the diagnosis of diseases associated with SNPs (such as  
 CC sickle cell anemia, agammaglobulinemia, diabetes insipidus, Lesch-Nyhan  
 CC syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease,  
 CC familial hypercholesterolemia, polycystic kidney disease, hereditary  
 CC spherocytosis, Von Willebrand's disease, tuberous sclerosis, hereditary  
 CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos  
 CC syndrome, osteogenesis imperfecta, and acute intermittent porphyria,  
 CC symptoms of, or susceptibility to, multifactorial diseases of which a  
 CC component is or may be genetic, such as autoimmune diseases,  
 CC inflammation, cancer, diseases of the nervous system, and infection by  
 CC pathogenic microorganisms, autoimmune diseases including rheumatoid  
 CC arthritis, multiple sclerosis, diabetes (insulin-dependent and non-  
 CC independent), systemic lupus erythematosus and Graves disease, cancers  
 CC including cancers of the bladder, brain, breast, colon, oesophagus,  
 CC kidney, leukaemia, liver, lung, oral cavity, ovary, pancreas, prostate,  
 CC skin, stomach and uterus, longevity, appearance (e.g., baldness,  
 CC obesity), strength, speed, endurance, fertility, and susceptibility or  
 CC receptivity to particular drugs or therapeutic treatments), in forensics  
 CC and in paternity testing. ABK65381-ABK65941 represent human single  
 CC nucleotide polymorphisms of the invention  
 XX SQ Sequence 21 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 1 Other;  
 Query Match 0.8%; Score 14.4; DB 1; Length 21;  
 Best Local Similarity 83.3%; Pred. No. 7e+02;  
 Matches 15; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
 QY 886 GGGAACATCATCAACATG 903  
 ||||| :|||  
 Db 2 GGGAACAGCMTCCACATG 19  
 RESULT 610  
 ABA94579  
 ID ABA94579 standard; DNA; 21 BP.  
 AC ABA94579;  
 XX 09-APR-2002 (first entry)  
 DE A. pullulans xynA locus DNA amplifying primer APXR.  
 KW Xylanase; xynA; transcriptional regulation; xylan; xylose; enzyme;  
 KW fungal; pharmaceutical; food; chemical; PCR primer; ss.  
 XX Aureobasidium pullulans.  
 OS WO2001196578-A2.  
 XX WO2001196578-A2.  
 XX 20-DEC-2001.  
 XX 14-JUN-2001; 2001WO-US019340.  
 XX 15-JUN-2000; 2000US-00595344.  
 XX (UYGE-) UNIV GEORGIA RES FOUND INC.  
 XX Li X, Ljungdahl LG;  
 XX WPT; 2002-130735/17.  
 XX New isolated nucleic acid encoding a signal peptide for efficient and  
 PT economical secreted expression of a protein of interest in a eukaryotic  
 PT cell, widely used in pharmaceutical, food and chemical industries.

XX Example 1; Page 28; 43pp; English.  
 XX CC The invention relates to an isolated nucleic acid molecule comprising a  
 CC xylanase (xynA) transcriptional regulatory sequence operably linked to a  
 CC heterologous coding sequence. Provided is a method for producing a  
 CC heterologous protein in Aureobasidium pullulans, by up-regulating the  
 CC expression of a sequence encoding a heterologous protein by adding xylan  
 CC or xylose to a medium in which a recombinant A. pullulans cell comprising  
 CC the new isolated nucleic acid molecule is cultured, where the medium  
 CC contains glucose at a concentration less than 0.02 % (weight/volume) and  
 CC a xynA transcription regulatory sequence is operably linked to the  
 CC sequence encoding the heterologous protein, and the heterologous protein  
 CC is expressed. The nucleic acid containing a signal peptide-encoding  
 CC sequence, is useful for efficient and economical secreted expression of a  
 CC protein of interest in a eukaryotic cell, especially a fungal cell such  
 CC as Aureobasidium pullulans. It may be used as a probe. The proteins  
 CC produced are widely used in pharmaceutical, food, chemical and other  
 CC industries. The present sequence represents a PCR primer for amplifying  
 CC the nucleotide sequence of A. pullulans xynA locus  
 XX SQ Sequence 21 BP; 4 A; 9 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.4; DB 1; Length 21;  
 Best Local Similarity 93.8%; Pred. No. 7e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 308 CACTCAGCTCGCACC 323  
 ||||| :|||  
 Db 2 CACTCAGCTCGCACC 17  
 RESULT 611  
 ABS98129/c  
 ID ABS98129 standard; DNA; 21 BP.  
 XX ABS98129;  
 XX 23-DEC-2002 (first entry)  
 DE Human multidrug resistance gene polymorphic sequence #31.  
 KW Human; ds; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1;  
 KW cytochrome P450 A2; CYP4501A2; cytochrome P450 02B; CYP45002E1; LTF;  
 KW adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR1I2;  
 KW aryl hydrocarbon receptor nuclear translocator; AHT; cathepsin S; CTSS;  
 KW cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological;  
 KW glutathione-S-transferase 12; GSTI2; histamine-N-methyl transferase;  
 KW HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NMMT;  
 KW NADPH quinone oxidoreductase 2; NQO2; sulfotransferase; thermolabile; STM;  
 KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;  
 KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; uridine receptor; uPA;  
 KW multidrug resistance 1; lactoferrin; orphan nuclear receptor;  
 KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;  
 KW altered drug metabolism; cardiovascular function; colorectal tumour;  
 KW central nervous system; pulmonary; immunological; SNP;  
 KW single nucleotide polymorphism.  
 XX Homo sapiens.  
 OS WO200257410-A2.  
 XX 25-JUL-2002.  
 XX 28-NOV-2001; 2001WO-US044838.  
 XX 28-NOV-2000; 2000US-00724389.  
 XX (DNAS-) DNA SCI LAB INC.  
 XX Guida M, Hall J;



PD 01-MAY-2003.  
XX  
XX  
XX 23-OCT-2002; 2002WO-GB004785.  
XX  
XX 23-OCT-2001; 2001GB-00025369.  
XX 23-OCT-2001; 2001GB-00025372.  
XX  
XX (UYMA-) UNIV VICTORIA MANCHESTER.  
XX  
XX Kadler KE, Bulleid NJ;  
XX WPI; 2003-504991/47.  
XX  
XX Novel modified pro-alpha-chain useful for treating wounds and fibrotic  
XX disorders, has triple helical forming domain linked to N-terminal domain  
XX that contains a polypeptide sequence from proteoglycan protein core.  
XX  
XX Example 1; Page 33; 73pp; English.  
XX  
XX The present sequence is that of a 5' primer, which was used with the 3'  
XX primer given in ACC58763 for the PCR amplification of the pro-alpha1(III)  
XX chain. The PCR product was used to prepare a DNA molecule (see ACC58766)  
XX encoding a modified pro-alpha chain (see ABR42661) in which decorin  
XX replaced the globular domain of the N-propeptide of the pro-alpha1(III)  
XX chain. This is an example of modified pro-alpha chains of the invention  
XX that may form part of a procollagen molecule for incorporation into  
XX collagen polymers, matrices and gels used to treat wounds and fibrotic  
XX disorders, in tissue replacement, and in cosmetic treatments  
XX  
XX Sequence 21 BP; 7 A; 5 C; 6 G; 3 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 14.4; DB 1; Length 21;  
Best Local Similarity 93.8%; Pred. No. 7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 764 TGCTCAAGGACCTCAA 779  
||| ||||| |||||  
Db 3 TGGTCAAGGACCTCAA 18

RESULT 614  
AAT97858  
ID AAT97858 standard; DNA; 22 BP.  
AC AAT97858;  
XX  
XX 09-MAR-1998 (first entry)  
DT  
DE PCR primer 7 for DNA encoding chimeric Ewing's sarcoma-WT1 protein.  
XX  
XX Ewing's sarcoma; EWS; EWS-WT1 protein; peripheral neuroectodermal tumour;  
XX PNET; breakpoint locus; Wilms' tumour;  
XX desmoplastic small round cell tumour; DSCR tumour; PCR primer; ss.  
XX  
XX Synthetic.  
XX Homo sapiens.  
XX  
XX US5670317-A.  
XX  
XX 23-SEP-1997.  
PD  
XX  
XX 08-MAY-1995; 95US-00437027.  
XX  
XX 08-MAY-1995; 95US-00437027.  
XX  
XX (SLOAN) SLOAN KETTERING INST CANCER RES.  
XX  
XX Ladanyi M, Gerald W;  
XX  
XX WPI; 1997-479448/44.  
XX  
XX Diagnosis of desmoplastic small round cell tumours - by detecting nucleic  
XX acid encoding chimeric EWS-WT1 protein.  
PT

XX Disclosure; Col 29; 34pp; English.  
XX  
XX Oligonucleotides AAT97852-68 are used both as PCR primers (in reverse  
XX transcriptase PCR), and probes for the detection of DNA encoding a  
XX chimeric Ewing's sarcoma (EWS)-WT1 protein. EWS is also known as  
XX peripheral neuroectodermal tumour (PNET). WT1 was screened as a  
XX breakpoint locus because of its involvement in Wilms' tumour, which  
XX shares some histopathologic features of desmoplastic small round cell  
XX (DSRC) tumours. The EWS-WT1 chimeric transcript has been detected in 11  
XX out of 12 DSRC tumours studied and in none of 49 other tumours. DSRC  
XX tumours are associated with translocation of the EWS gene. The present  
XX oligonucleotide is complementary to the WT1 intron 5' to exon 7, and is  
XX used in a method for the diagnosis of DSRC tumours in patients. The  
XX method comprises detecting a nucleic acid molecule encoding a chimeric  
XX EWS-WT1 protein in a sample from the subject, where positive detection  
XX indicates the presence of a DSRC tumour  
XX  
XX Sequence 22 BP; 1 A; 10 C; 2 G; 9 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 14.4; DB 1; Length 22;  
Best Local Similarity 93.8%; Pred. No. 7.3e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 1697 CTTACTCTCTGCCTAC 1712  
||||| ||||| |||||  
Db 7 CTTACTCTCTGCCTGC 22

RESULT 615  
AAX09130/c  
ID AAX09130 standard; DNA; 22 BP.  
XX  
XX AAX09130;  
XX  
XX 24-MAR-1999 (first entry)  
DT  
DE Human biallelic polymorphic marker upstream primer #10.  
XX  
XX Polymorphism; biallelic; human; forensic; paternity testing; disease;  
XX detection; phenotypic typing; characteristic; infection; hereditary;  
XX autoimmune disease; cancer; inflammation; drug; therapy; medicament;  
XX treatment; marker; primer; ss.  
XX  
XX Synthetic.  
XX Homo sapiens.  
XX  
XX WO9820165-A2.  
XX  
XX 14-MAY-1998.  
PD  
XX  
XX 05-NOV-1997; 97WO-US020313.  
XX  
XX 06-NOV-1996; 96US-0030455P.  
XX  
XX (WHEED) WHITEHEAD INST BIOMEDICAL RES.  
XX  
XX Lander ES, Wang D, Hudson T;  
XX  
XX WPI; 1998-286974/25.  
XX  
XX New isolated nucleic acid segments from the human genome - used for  
XX determining polymorphic forms for use in e.g. forensics, paternity  
XX testing or phenotypic typing for disease.  
XX  
XX Claim 15; Page 47; 310pp; English.  
XX  
XX AAX09121-X10268 are allele-specific oligonucleotide primers used in the  
XX isolation of various biallelic polymorphic markers found in the human  
XX genome (represented in AAX10269-X12937). These primers can be used in a  
XX method for determining polymorphic forms in an individual for use in e.g.  
XX forensics, paternity testing or for phenotypic typing for diseases such  
XX as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular  
XX

CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial  
 CC hypercholesterolemia, polycystic kidney disease, hereditary  
 CC spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary  
 CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos  
 CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,  
 CC autoimmune diseases, inflammation, cancer, diseases of the nervous  
 CC system, infection by pathogenic microorganisms, and characteristics such  
 CC as longevity, appearance (e.g. baldness, obesity), strength, speed,  
 CC endurance, fertility, and susceptibility or receptivity to particular  
 CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid  
 CC segments can also be used to produce medicaments for the treatment or  
 CC prophylaxis of such diseases  
 XX  
 SQ Sequence 22 BP; 9 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 22;

Best Local Similarity 93.8%; Pred. No. 7.3e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1457 TCTTCTCAGTCGTGGG 1472

DB 16 TCTTCTCAGTCGTGTG 1

RESULT 616

AAV32818

ID AAV32818 standard; DNA; 22 BP.

AC AAV32818;

XX

XX

DT 26-OCT-1998 (first entry)

XX

XX

DE Reverse primer for Staphylococcus aureus pcp34 gene.

XX

XX

KW collagen adhesin gene; cna; primer; PCR; amplification; cnaB;

KW cna-up gene; fibronectin binding protein A gene; fnbA; fnbB; beta-toxin;

KW pcp gene; pcp12 gene; pcp34 gene; flb; biotyping;

KW southern blot hybridisation; insertion sequence typing;

KW plasmid profile analysis; ss.

XX

XX

OS Synthetic.

OS Staphylococcus aureus.

XX

XX

PN US5789171-A.

XX

XX

PD 04-AUG-1998.

XX

XX

PF 20-JUN-1996; 96US-00667079.

XX

XX

PR 20-JUN-1996; 96US-00667079.

XX

XX

PA (UVAR-) UNIV ARKANSAS.

XX

XX

PI Smeltzer MS;

XX

XX

DR WPI; 1998-446070/38.

XX

XX

PT Differentiating clinical Staphylococcus aureus strains - uses Southern

PT blot probes for specific genes that determine genomic organisation.

XX

PS Example 8; Fig 7; 25pp; English.

XX

XX

CC Reverse and forward (AAV32817) primers were used to amplify the

CC Staphylococcus aureus pcp34 gene. The PCR product was used as a probe in

CC the method of the invention. The invention provides a method of

CC gene. This polymorphic based genetic identification method has proved  
 CC more specific in identifying epidemiologically related strains than,  
 CC previous techniques, including polymerase chain reaction, biotyping,  
 CC insertion sequence typing and plasmid profile analysis

XX

SQ Sequence 22 BP; 8 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 22;

Best Local Similarity 93.8%; Pred. No. 7.3e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1306 TTCAAGACATCAACT 1321

DB 5 TCCAGACATCAACT 20

RESULT 617

AAH49379

ID AAH49379 standard; DNA; 22 BP.

XX

AC AAH49379;

XX

XX

DT 30-NOV-2001 (first entry)

XX

XX

DE Human papilloma virus E6 PCR primer 33ME51.

XX

XX

KW PCR primer; E6; dedifferentiation; micro-metastasis; cancer cell;

KW cytodiagnostic; cervical carcinoma; ss.

XX

XX

OS Human papillomavirus.

XX

XX

PN DE10109259-A1.

XX

XX

PD 13-SEP-2001.

XX

XX

PF 26-FEB-2001; 2001DE-01009259.

XX

XX

PR 25-FEB-2000; 2000DE-01009081.

XX

XX

PA (GIES/) GIESING M.

XX

XX

DR WPI; 2001-607957/70.

XX

XX

PT Characterizing increased dedifferentiation of cancer cells useful for

PT diagnosing cancer, particularly early cervical cancer, comprises applying

PT body fluids to a foil covered slide and detecting dye-marked cells by

PT laser.

XX

XX

PS Example 2; Page 14; 18pp; German.

XX

XX

CC This invention describes a novel method for characterizing increased

CC dedifferentiation and micro-metastasis of cancer cells, comprising

CC applying body fluid cells to a carrier and cytodiagnostically examining

CC its cells using micro-dissection to separate cytodiagnostically

CC distinguishable cells from normal cells and performing at least one gene

CC analysis on the separated cells. The method is used to diagnose cancer,

CC particularly for the early recognition of cervical carcinoma. This

CC sequence represents a PCR primer used in the amplification of the human

CC Papilloma virus E6 gene used to illustrate the method of the invention

XX

XX

SQ Sequence 22 BP; 5 A; 11 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.4; DB 1; Length 22;

Best Local Similarity 93.8%; Pred. No. 7.3e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 771 GGACCTCAACACGCC 786

DB 3 GGACCTCAACACGCC 18

RESULT 618

ACC82981

```

ID ACC82981 standard; DNA; 22 BP.
XX AC ACC82981;
XX PD
XX DT 27-OCT-2003 (revised)
XX DT 27-AUG-2003 (first entry)
XX
XX Outer reverse PCR primer used to sequence HIV-1 tat gene.
XX DE Regulatory gene; accessory gene; HIV; human immunodeficiency virus;
XX KW vaccine; infection; gene therapy; tat; PCR; primer; ss.
XX KW
XX OS Human immunodeficiency virus 1.
XX PN WO2003037919-A2.
XX PD
XX PD 08-MAY-2003.
XX PF 31-OCT-2002; 2002WO-IB004550.
XX PR 31-OCT-2001; 2001ZA-00008978.
XX
XX (SAME-) SOUTH AFRICAN MEDICAL RES COUNCIL.
XX PA (UYCA-) UNIV CAPE TOWN.
XX
XX PI Williamson C, Van Harmelen JH, Gray CM, Bourn W, Karim SA;
XX DR WPI; 2003-430497/40.
XX
XX New molecules comprising HIV-1 subtype isolate regulatory/accessory
XX PT genes, useful for manufacturing a vaccine for treating or preventing HIV
XX PT infection.
XX PS Disclosure; Page 20; 97pp; English.
XX
XX The invention relates to molecules comprising HIV-1 subtype isolate
XX CC regulatory/accessory genes (tat, nef and rev genes) and modifications and
XX CC derivatives thereof. The invention also provides proteins encoded by such
XX CC genes. Sequences of the invention are useful for manufacturing vaccines
XX CC for treating or preventing human immunodeficiency virus (HIV) infections.
XX CC They are also useful in gene therapy. The present sequence is a PCR
XX CC primer used to sequence HIV-1 tat gene. Note: This sequence is stated to
XX CC be the same as that shown as SEQ ID NO: 23 in sequence listing. However
XX CC this sequence has an additional base at its 3' end. (Updated on 27-OCT-
XX CC 2003 to standardise OS field)
XX
XX SQ Sequence 22 BP; 5 A; 11 C; 0 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 14.4; DB 1; Length 22;
Best Local Similarity 93.8%; Pred. No. 7.3e-02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 528 CCTCAATAGCCCATC 543
Db 1 CCTCAATATCCCATC 16
XX
RESULT 619
ADB80421
ID ADB80421 standard; DNA; 22 BP.
XX AC ADB80421;
XX PD
XX DT 04-DEC-2003 (first entry)
XX
XX Rat CLCAl gene PCR primer #8.
XX
ss; primer; antiinflammatory; antiasthmatic; antiallergic; CLCAl;
XX KW calcium activated chloride channel protein; chest disorder;
XX KW airway disorder; chronic obstructive lung disease; chronic bronchitis;
XX KW bronchial asthma; rhinitis; hay fever; pneumonia.
XX
XX Rattus sp.

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XX WO2003037927-A1.
XX PD
XX PD 08-MAY-2003.
XX PF
XX PF 01-NOV-2002; 2002WO-JP011417.
XX PR
XX PR 02-NOV-2001; 2001JP-00337864.
XX PR 13-DEC-2001; 2001JP-00380099.
XX PR 18-JAN-2002; 2002JP-00010035.
XX
XX (TAKE ) TAKEDA CHEM IND LTD.
XX
XX Nakanishi A, Morita S;
XX WPI; 2003-430500/40.
XX
XX Rat CLCAl gene and protein encoded by it useful for screening inhibitors
XX PT of its activity and expression and as chronic obstructive lung disease
XX PT and bronchial asthma remedies.
XX
XX Example 2; Page 97; 115pp; Japanese.
XX
XX The invention relates to proteins and their salts and partial peptides
XX CC which are the expression product of the rat CLCAl gene or are related
XX CC proteins with similar activity. CLCAl is a calcium activated chloride
XX CC channel protein. The proteins are useful for the treatment, prevention
XX CC and diagnosis of chest and airway disorders including chronic obstructive
XX CC lung disease, chronic bronchitis, bronchial asthma, chronic rhinitis,
XX CC acute rhinitis, allergic rhinitis, hay fever and pneumonia. This sequence
XX CC corresponds to a PCR primer used to isolate and clone the rat CLCAl gene
XX CC (ADB80434).
XX
XX SQ Sequence 22 BP; 6 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 14.4; DB 1; Length 22;
Best Local Similarity 93.8%; Pred. No. 7.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 672 AAGCAAGCTCACAGAC 687
Db 3 AAGCGAGCTCACAGAC 18
XX
RESULT 620
AAT11978/c
ID AAT11978 standard; DNA; 19 BP.
XX AC AAT11978;
XX PD
XX DT 25-MAR-2003 (revised)
XX DT 13-MAR-1996 (first entry)
XX
XX CMV antisense oligonucleotide (ISIS 5481).
XX
XX antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;
XX KW intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..19
XX /tag= a
XX /note= "phosphorothioate backbone"
XX
XX US5442049-A.
XX
XX 15-AUG-1995.
XX
XX 25-JAN-1993; 93US-00009263.
XX
XX 19-NOV-1992; 92US-00927506.
XX

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PA (ISIS-) ISIS PHARM INC.
XX Baker B, Draper K, Anderson K;
XX WPI; 1995-292538/38.
XX
XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to
XX a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
XX treatment of CMV diseases.
XX
XX Example 10; Col 17; 66pp; English.
XX
XX AAT11971-84 are antisense oligonucleotides (ONs) against human
XX cytomegalovirus (CMV) that displayed activities of at least 50 % of
XX control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal
XX mismatches could be tolerated without loss of antiviral activity. ISIS
XX 4376 is a 19-mer antisense ON related to ISIS 2292, but with one
XX nucleotide removed from each end. Antisense ONs targeting CMV DNA or RNA
XX coding for the IE1, IE2 or DNA polymerase proteins have been shown to be
XX effective in therapy, prophylaxis and diagnosis of CMV infection. The ONs
XX may be modified to reduce nuclease resistance and to increase their
XX efficacy. Modifications include phosphorothioate backbones, alkyl and
XX halogen-substituted sugar moieties at the 2' position. (Updated on 25-MAR
XX -2003 to correct PF field.)
XX
XX Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 130 CGGATGAGAGAGATCAAAAC 148
XX | | | | | | | | | | | | | | | | | |
XX Db 19 CGCAAGAGAGAGAGATCAAAAC 1
XX
XX RESULT 621
XX AAT11971/c
XX ID AAT11971 standard; DNA; 19 BP.
XX
XX AC AAT11971;
XX
XX DT 25-MAR-2003 (revised)
XX DT 13-MAR-1996 (first entry)
XX
XX CMV antisense oligonucleotide (ISIS 4376).
XX
XX antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;
XX intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX modified_base 1..19
XX FT /tag= a
XX FT /note= "phosphorothioate backbone"
XX
XX US5442049-A.
XX
XX PD 15-AUG-1995.
XX
XX PF 25-JAN-1993; 93US-00009263.
XX
XX PR 19-NOV-1992; 92US-00927506.
XX
XX (ISIS-) ISIS PHARM INC.
XX Baker B, Draper K, Anderson K;
XX WPI; 1995-292538/38.
XX
XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to
XX a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
XX treatment of CMV diseases.
XX
XX Example 10; Col 17; 66pp; English.
XX
XX AAT11971-84 are antisense oligonucleotides (ONs) against human
XX cytomegalovirus (CMV) that displayed activities of at least 50 % of
XX control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal
XX mismatches could be tolerated without loss of antiviral activity.
XX Antisense ONs targeting CMV DNA or RNA coding for the IE1, IE2 or DNA
XX polymerase proteins have been shown to be effective in therapy,
XX prophylaxis and diagnosis of CMV infection. The ONs may be modified to
XX reduce nuclease resistance and to increase their efficacy. Modifications
XX include phosphorothioate backbones, alkyl and halogen-substituted sugar
XX moieties at the 2' position. (Updated on 25-MAR-2003 to correct PF
XX field.)
XX
XX Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 130 CGGATGAGAGAGATCAAAAC 148
XX | | | | | | | | | | | | | | | | | |
XX Db 19 CGCAAGAGAGAGAGATCAAAAC 1
XX
XX RESULT 622
XX AAT01679/c
XX ID AAT01679 standard; DNA; 19 BP.
XX
XX AC AAT01679;
XX
XX DT 17-DEC-1995 (first entry)
XX
XX DE Peptide nucleic acid targeting CMV IE2 nuc sig 2.
XX
XX peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
XX antiviral; diagnostic; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX misc_feature 1..19
XX FT /tag= a
XX FT /note= "at least one (and preferably all) of the backbone
XX subunits are composed of amide units, so that the
XX oligomer consists of the nucleobases attached covalently
XX to a polyamide backbone"
XX
XX WO9504748-A1.
XX
XX PD 16-FEB-1995.
XX
XX PF 09-AUG-1994; 94WO-US0009039.
XX
XX PR 09-AUG-1993; 93US-00104438.
XX
XX (ISIS-) ISIS PHARM INC.
XX Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowsett LM;
XX WPI; 1995-090841/12.
XX
XX New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
XX papillomavirus - are stable anti-sense molecules with high affinity for
XX single stranded DNA, used for treating infections.
XX
XX Claim 2; Page 44; 65pp; English.
XX
XX New oligomers are claimed which (A) have at least one peptide nucleic
XX acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5'
XX untranslated region, intron/exon (I/E) junction or coding sequence of
XX

```

CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or  
 CC hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a  
 CC papillomavirus. The PNA's can be used to target RNA and single stranded  
 CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence  
 CC they may be used therapeutically for modulating cytomegalovirus and  
 CC papillomavirus processes and also as diagnostics (e.g., as probes for  
 CC specific mRNAs). PNA oligomers have high affinity for complementary  
 CC single stranded DNA. They are also able to form triple helices in which a  
 CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds  
 CC with the resulting double helix or with the first PNA strand. The PNAs  
 CC possess no significant charge and are water soluble, which facilitates  
 CC cellular uptake. Further, since they contain amides of non-biological  
 CC amino acids, they are biostable and resistant to enzymatic degradation by  
 CC proteases. The present sequence targets CMV IE2 nuclear localisation  
 CC signal 2  
 CC  
 XX  
 SQ Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 130 CGGATGAGAGAGATCAAC 148  
 ||| ||||| |||||  
 Db 19 CGCAGAGAGAGAGCAAC 1

RESULT 623  
 AAT01649/c  
 ID AAT01649 standard; DNA; 19 BP.  
 XX  
 AC AAT01649;  
 DT 17-DEC-1995 (first entry)  
 DE Peptide nucleic acid targeting CMV IE2 nuc sig 2.  
 XX  
 KW peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;  
 KW antiviral; diagnostic; ss.  
 XX  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT misc\_feature 1..19  
 FT /\*tag= a  
 FT /note= "at least one (and preferably all) of the backbone  
 FT subunits are composed of amide units, so that the  
 FT oligomer consists of the nucleobases attached covalently  
 FT to a polyamide backbone"  
 XX  
 XX WO9504748-A1.  
 XX  
 XX 16-FEB-1995.  
 XX  
 XX 09-AUG-1994; 94WO-US009039.  
 XX  
 XX 09-AUG-1993; 93US-00104438.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowsert LM;  
 XX  
 XX WPI; 1995-090841/12.  
 XX  
 XX New peptide nucleic acid oligomers hybridisable to cytomegalovirus or  
 XX papillomavirus - are stable anti-sense molecules with high affinity for  
 XX single stranded DNA, used for treating infections.  
 XX  
 XX Claim 2; Page 43; 65pp; English.

PS  
 CC New oligomers are claimed which (A) have at least one peptide nucleic  
 CC acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5'  
 CC untranslated region, intron/exon (I/E) junction or coding sequence of

CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or  
 CC hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a  
 CC papillomavirus. The PNA's can be used to target RNA and single stranded  
 CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence  
 CC they may be used therapeutically for modulating cytomegalovirus and  
 CC papillomavirus processes and also as diagnostics (e.g., as probes for  
 CC specific mRNAs). PNA oligomers have high affinity for complementary  
 CC single stranded DNA. They are also able to form triple helices in which a  
 CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds  
 CC with the resulting double helix or with the first PNA strand. The PNAs  
 CC possess no significant charge and are water soluble, which facilitates  
 CC cellular uptake. Further, since they contain amides of non-biological  
 CC amino acids, they are biostable and resistant to enzymatic degradation by  
 CC proteases. The present sequence targets CMV IE2 nuclear localisation  
 CC signal 2  
 CC  
 XX  
 SQ Sequence 19 BP; 0 A; 6 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 131 GGATGAGAGAGATCAACG 149  
 ||| ||||| |||||  
 Db 19 GCAAGAGAGAGAGCAACG 1

RESULT 624  
 AAQ95226  
 ID AAQ95226 standard; DNA; 19 BP.  
 XX  
 AC AAQ95226;  
 XX  
 DT 09-FEB-1996 (first entry)  
 DE Simple tandem repeat (STR) PCR primer wgla3a\*.  
 XX  
 KW Simple tandem repeat; STR; treatment; genetic; diagnosis;  
 KW characterisation; mapping; linkage studies; analysis; alleles;  
 KW PCR primer wgla3a\*; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX WO9517522-A2.  
 XX  
 XX 29-JUN-1995.  
 XX  
 XX 21-DEC-1994; 94WO-GB002789.  
 XX  
 XX 21-DEC-1993; 93GB-00026052.  
 XX  
 XX (UYLE-) UNIV LEICESTER.  
 XX  
 XX Jeffreys AJ, Armour J;  
 XX  
 XX WPI; 1995-240682/31.  
 XX  
 XX Identifying simple tandem repeat loci in DNA - by screening DNA library  
 XX to enrich for fragments contg. the repeats before cloning and  
 XX rescreening, also simple tandem repeats for treatment or diagnosis.  
 XX  
 XX Claim 25; Page 36; 51pp; English.

XX  
 XX AAQ95226 and AAQ95227 are a primer pair for the PCR amplification of the  
 XX simple tandem repeat (STR) corresponding to wgla3. The STR can be used  
 XX for treatment and diagnosis in human and veterinary medicine, partic. for  
 XX genetic characterisation, mapping, linkage studies and analysis/diagnosis  
 XX of acquired disease alleles  
 XX  
 XX Sequence 19 BP; 3 A; 9 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 6.9e+02;

```

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1446 GAACATCCATCTTCCTC 1464
   |||||
Db 1 GATCCATCCATCTTCCTC 19

RESULT 625
AAT10879
XX AAT10879 standard; DNA; 19 BP.
XX AC
XX AAT10879;
XX DT
XX 06-SEP-1996 (first entry)
XX DE
XX Human cytochrome P4501A2 (CYP1A2) gene PCR amplification primer.
XX CY
XX Cytochrome P450; detection; diagnosis; polymorphism; substitution;
XX KW metabolism; respiration; polymerase chain reaction; ss.
XX OS
XX Synthetic.
XX WO9601328-A1.
XX PN
XX 18-JAN-1996.
XX PD
XX 06-JUL-1995; 95WO-JP001352.
XX PF
XX 06-JUL-1994; 94JP-00154571.
XX PR
XX (SAKA ) OTSUKA PHARM CO LTD.
XX PA (KIMS/) KIM S.
XX PA (SHIN/) SHIN K.
XX PA (SHIN/) SHIN J.
XX PI
XX Fukui T, Katsuragi K, Kinoshita M;
XX WPI; 1996-087678/09.
XX DR
XX Detection of human cytochrome p4501A2 gene polymorphism - useful in gene
XX PT diagnosis of metabolic activity polymorphism.
XX PS Example 1; Page 8; 23pp; Japanese.
XX CC
XX AAT10877-T10898 are PCR primers used for the amplification of the human
XX CC cytochrome P4501A2 gene. They are used in a method for detecting a
XX CC cytochrome P4501A2 gene polymorphism, in part. for detecting a T to G
XX CC base substitution at position 2064 or a C to A substitution at position
XX CC 2640. The method is easy, convenient and has a high degree of sensitivity
XX CC and accuracy. Polymorphisms in the P4501A2 gene can lead to a
XX CC modification of metabolism which may be beneficial or deleterious
XX SQ Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 270 ACGTCTGCTCTCTGGGAA 288
   |||||
Db 1 ATGTGCTGACCCCTGGGAA 19

RESULT 626
AAV41067/c
XX ID
XX AAV41067 standard; DNA; 19 BP.
XX AC
XX AAV41067;
XX DT
XX 25-SEP-1998 (first entry)
XX DE
XX Primer TEL:114U19 for abnormality detection.
XX XX

```

PCR primer; chromosomal abnormality; abnormality detection; leukaemia; lymphoma; carcinoma; adenocarcinoma; sarcoma; glioma; neuroblastoma; medullablastoma; malignant melanoma; malignant neoplastic condition; ss.

Synthetic.

Homo sapiens.

WO9824928-A2.

11-JUN-1998.

08-DEC-1997; 97WO-DK000556.

06-DEC-1996; 96DK-00001401.

(PALL/) PALLISGAARD N.

Pallisgaard N, Hokland P;

WPI; 1998-333344/29.

Detection of chromosomal abnormalities - by subjecting patient sample nucleic acids to a multiplex molecular amplification procedure using primers specific for characteristic nucleic acid sequence.

Claim 73; Page 107; 126pp; English.

This sequence represents a primer used in the method of the invention for the detection of the presence or absence of chromosomal abnormalities, each abnormality being associated with a condition in a subject and each being defined by at least one characteristic nucleic acid sequence. The method comprises: (a) obtaining a sample of nucleic acids derived from a subject which may harbour one of the chromosomal abnormalities; (b) subjecting the sample to a multiplex molecular amplification (MMA) procedure, where a number of the characteristic sequences, if present in a sufficient amount, will be amplified; (c) retrieving the product(s) from step (b), and detecting the presence and/or absence of an amplicon characteristic of the abnormal sequences to detect the presence or absence of corresponding chromosomal abnormalities; where the MMA procedure comprises the use of at least 7 mutually distinct primers (MDP) in one single reaction mixture, each of the primers defining an end of at least one characteristic nucleic acid sequence, and where at least one of the primers defines the first end of at least two characteristic nucleic acid sequences, the characteristic nucleic acid sequences each being determined in their opposite ends by MDP selected from the remainder of the MDP. The methods can be used for detecting chromosomal abnormalities associated with diseases including numerous leukaemia's, lymphoma's, carcinoma's, adenocarcinoma's, sarcoma's, glioma's, neuroblastoma's, medullablastoma, malignant melanoma, and malignant neoplastic conditions

Sequence 19 BP; 4 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 716 TGGACATGAAGAGGGGGC 734  
DB 19 TGGACATGAAGTGGCTC 1

RESULT 627  
AAV26433  
ID AAV26433 standard; DNA; 19 BP.  
XX AAV26433;  
XX AAV26433;  
XX  
DT 30-JUL-1998 (first entry)  
XX  
XX lacZ-specific primer 1.  
XX  
XX lacZ; adeno-associated virus vector; therapeutic; liver; hepatic disease;  
KW ss; PCR; primer; amplification.  
KW



OS Synthetic.  
 XX WO9809524-A1.  
 XX PD 12-MAR-1998.  
 XX PF 02-SEP-1997; 97WO-US015453.  
 XX PR 06-SEP-1996; 96US-0025616P.  
 XX PR 11-SEP-1996; 96US-0025649P.  
 XX PA (CHIR ) CHIRON CORP.  
 XX PA (INDV ) UNIV INDIANA.  
 XX PI Srivastava A, Ponnazhagan S, Chloemer RH, Wang X, Yoder MC;  
 XX Zhou S, Escobedo J, Dwarki V;  
 XX WPI; 1998-193255/17.  
 XX DR Novel adeno-associated viral vectors - for liver specific delivery of  
 XX PT therapeutic molecule.  
 XX PS Example 1; Page 19; 32pp; English.  
 XX CC The lacZ-specific primers (AAV26433 and 26434) were used to amplify and  
 XX CC detect the lacZ gene which had been injected into C57Bl/6 mice using a  
 XX CC recombinant adeno-associated virus (AAV) vector. This confirmed the adeno  
 XX CC -associated virus vector can be used to deliver a therapeutic molecule to  
 XX CC the liver of a mammal. This can be used for the expression of therapeutic  
 XX CC molecules such as secretory proteins, antisense molecules or ribozymes,  
 XX CC in the liver, especially to treat hepatic diseases  
 XX CC  
 XX SQ Sequence 19 BP; 3 A; 1 C; 9 G; 6 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 Qy 223 GATGAGAGTGGTGGTGTG 241  
 Db 1 GATGAGCGTGGTGGTTATG 19  
 RESULT 628  
 AAX17888/c  
 ID AAX17888 standard; DNA; 19 BP.  
 AC AAX17888;  
 DT 11-MAY-1999 (first entry)  
 DE Anti-CMV oligonucleotide #4376.  
 XX Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;  
 KW cytomagalovirus; inhibition; replication; sugar modification;  
 KW phosphorothioate; infection; retinitis; ss.  
 XX Synthetic.  
 OS Human herpesvirus 5.  
 OS WO9845314-A1.  
 XX PD 15-OCT-1998.  
 XX PF 07-APR-1998; 98WO-US006895.  
 XX PR 09-APR-1997; 97US-00838715.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Draper KG, Kisner DL, Anderson KP, Chapman S;  
 XX WPI; 1998-568330/48.  
 XX DR New antisense oligonucleotides that target cytomegalovirus nucleic acid -  
 XX FT particularly including 2-methoxyethoxy sugar modifications, especially  
 XX PT for treating viral retinitis, with long-lasting retention in the retina.  
 XX PS Claim 7; Page 30; 99pp; English.

DR WPI; 1998-568330/48.  
 XX New antisense oligonucleotides that target cytomegalovirus nucleic acid -  
 XX FT particularly including 2-methoxyethoxy sugar modifications, especially  
 XX PT for treating viral retinitis, with long-lasting retention in the retina.  
 XX PS Disclosure; Page 30; 99pp; English.  
 XX CC Antisense oligonucleotides (AAX17861-X17924) are targeted to a nucleic  
 XX CC acid (AAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA  
 XX CC polymerase of cytomegalovirus (CMV) and are able to inhibit CMV  
 XX CC replication. Optionally the oligonucleotides include at least one 2'-(2-  
 XX CC methoxyethoxy) sugar modification or phosphorothioate internucleotide  
 XX CC linkages. The oligonucleotides are used to inhibit CMV infections (by in  
 XX CC vivo or in vitro contact with cells, tissues or body fluids), especially  
 XX CC to treat or prevent CMV infections, particularly retinitis  
 XX CC  
 XX SQ Sequence 19 BP; 0 A; 6 C; 3 G; 10 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 Qy 131 GGATGAAGAAGATCAACG 149  
 Db 19 GCAAGAAGAAGACCAACG 1  
 RESULT 629  
 AAX17895/c  
 ID AAX17895 standard; DNA; 19 BP.  
 AC AAX17895;  
 DT 11-MAY-1999 (first entry)  
 DE Anti-CMV oligonucleotide #5481.  
 XX Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;  
 KW cytomagalovirus; inhibition; replication; sugar modification;  
 KW phosphorothioate; infection; retinitis; ss.  
 XX Synthetic.  
 OS Human herpesvirus 5.  
 OS WO9845314-A1.  
 XX PD 15-OCT-1998.  
 XX PF 07-APR-1998; 98WO-US006895.  
 XX PR 09-APR-1997; 97US-00838715.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Draper KG, Kisner DL, Anderson KP, Chapman S;  
 XX WPI; 1998-568330/48.  
 XX DR New antisense oligonucleotides that target cytomegalovirus nucleic acid -  
 XX FT particularly including 2-methoxyethoxy sugar modifications, especially  
 XX PT for treating viral retinitis, with long-lasting retention in the retina.  
 XX PS Claim 7; Page 30; 99pp; English.

|    |     |  |
|----|-----|--|
| XX | SQ  | Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;   |
|    |     | Query Match            0.8%; Score 14.2; DB 1; Length 19;<br>Best Local Similarity   84.2%; Pred. No. 6.9e+02;<br>Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  |
| QY | 130 | CGGATGAAGAAGATCAAC 148<br>           <br>DB 19 CGCAGAGAGAGGCAC 1   |
|    |     | RESULT 630<br>AAA82630<br>ID AAA82630 standard; DNA; 19 BP.<br>XX AC AAA82630;<br>XX DT 04-DEC-2000 (first entry)<br>XX cdk2 ribozyme binding site #67.<br>XX DE<br>XX RW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.<br>XX OS Mammalia.<br>XX FN WO200032765-A2.<br>XX PD 08-JUN-2000.<br>XX PF 06-DEC-1999; 99WO-US028772.<br>XX PR 04-DEC-1998; 98US-0110954P.<br>XX PA (IMMU-) IMMUSOL INC.<br>XX PI Tritz R, Welch PJ, Barber JR, Robbins JM;<br>XX DR WPI; 2000-412314/35.<br>XX PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves<br>PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,<br>PT PCNA and Cyclin B1.<br>XX Disclosure; Page 49; 109pp; English. |
|    |     | The present invention relates to a hairpin or hammerhead ribozyme,<br>CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase<br>CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.<br>CC Representative examples of ribozyme recognition sites are given in<br>CC AA82415 to AA86787. The ribozyme of the invention is useful for<br>CC inhibiting restenosis by introduction of the ribozyme into cells. The<br>CC ribozyme is resistant to endonuclease activity and hence is efficient in<br>CC restenosis treatment<br>XX Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;  |
|    |     | Query Match            0.8%; Score 14.2; DB 1; Length 19;<br>Best Local Similarity   84.2%; Pred. No. 6.9e+02;<br>Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  |
| QY | 975 | CCGAGACCTCAAGCCCAG 993<br>         <br>DB 1 CCGAGACCTTAACCTCAG 19  |
|    |     | RESULT 631<br>AAA82663<br>ID AAA82663 standard; DNA; 19 BP.<br>XX AC AAA82663;<br>XX DT 04-DEC-2000 (first entry)  |

DR WPI; 2000-412314/35.  
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.  
XX Disclosure; Page 53; 109pp; English.  
PS  
XX The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX  
SQ Sequence 19 BP; 2 A; 2 C; 8 G; 7 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 1158 GTGGGTGTGGGTGCATC 1176  
DB 1 GTGGAGTGTGGGTGATC 19  
  
RESULT 633  
AAA83090  
ID AAA83090 standard; DNA; 19 BP.  
AC AAA83090;  
XX  
XX 04-DEC-2000 (first entry)  
DT  
DE cdk7 ribozyme binding site #11.  
XX  
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX Mammalia.  
XX WO200032765-A2.  
XX 08-JUN-2000.  
XX  
XX 06-DEC-1999; 99WO-US028772.  
XX  
XX 04-DEC-1998; 98US-0110954P.  
XX (IMMU-) IMMUSOL INC.  
XX  
XX Tritz R, Welch PJ, Barber JR, Robbins JM;  
PI  
XX WPI; 2000-412314/35.  
XX  
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
DE RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
XX PCNA and Cyclin B1.  
XX  
XX Disclosure; Page 56; 109pp; English.  
XX  
XX The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX  
SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 1158 GTGGGTGTGGGTGCATC 1176  
DB 1 GTGGAGTGTGGGTGATC 19  
  
RESULT 633  
AAA83090  
ID AAA83090 standard; DNA; 19 BP.  
AC AAA83090;  
XX  
XX 04-DEC-2000 (first entry)  
DT  
DE cdk7 ribozyme binding site #11.  
XX  
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX Mammalia.  
XX WO200032765-A2.  
XX 08-JUN-2000.  
XX  
XX 06-DEC-1999; 99WO-US028772.  
XX  
XX 04-DEC-1998; 98US-0110954P.  
XX (IMMU-) IMMUSOL INC.  
XX  
XX Tritz R, Welch PJ, Barber JR, Robbins JM;  
PI  
XX WPI; 2000-412314/35.  
XX  
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.  
XX  
XX Disclosure; Page 56; 109pp; English.  
XX  
XX The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX  
SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 652 GCCACCGTCTACAAAGGCA 670  
DB 1 GCCACCGTCTACAAAGGCA 19  
  
RESULT 634  
AAA82766  
ID AAA82766 standard; DNA; 19 BP.  
XX  
XX AAA82766;  
AC  
XX 04-DEC-2000 (first entry)  
DT  
DE cdk3 ribozyme binding site #51.  
XX  
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX Mammalia.  
XX WO200032765-A2.  
XX 08-JUN-2000.  
XX  
XX 06-DEC-1999; 99WO-US028772.  
XX  
XX 04-DEC-1998; 98US-0110954P.  
XX (IMMU-) IMMUSOL INC.  
XX  
XX Tritz R, Welch PJ, Barber JR, Robbins JM;  
PI  
XX WPI; 2000-412314/35.  
XX  
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
DE RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
XX PCNA and Cyclin B1.  
XX  
XX Disclosure; Page 51; 109pp; English.  
XX  
XX The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX  
SQ Sequence 19 BP; 2 A; 8 C; 5 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 1094 CACTGTGTGTACGCGCCCC 1112  
DB 1 CACTGTGTGTACGCGCCCC 19  
  
RESULT 635  
AAA82998  
ID AAA82998 standard; DNA; 19 BP.  
XX  
XX AAA82998;  
AC  
XX 04-DEC-2000 (first entry)  
DT  
XX cdk6 ribozyme binding site #58.  
DE  
XX

```
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX Mammalia.
XX WO2000032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
XX Disclosure; Page 55; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
XX designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
XX other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
XX Representative examples of ribozyme recognition sites are given in
XX AAA82415 to AAA86787. The ribozyme of the invention is useful for
XX inhibiting restenosis by introduction of the ribozyme into cells. The
XX ribozyme is resistant to endonuclease activity and hence is efficient in
XX restenosis treatment
XX
XX Sequence 19 BP; 1 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1028 TGGCTGACTTGGCTGCGC.1046
XX
XX 1 TCGCTGACTTCGGCCTTGC 19
XX
XX
XX RESULT 636
XX AAA82631
XX ID AAA82631 standard; DNA; 19 BP.
XX
XX AC AAA82631;
XX
XX 04-DEC-2000 (first entry)
XX
XX cdk2 ribozyme binding site #68.
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX Mammalia.
XX
XX WO2000032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
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```
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
XX Disclosure; Page 49; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
XX designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
XX other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
XX Representative examples of ribozyme recognition sites are given in
XX AAA82415 to AAA86787. The ribozyme of the invention is useful for
XX inhibiting restenosis by introduction of the ribozyme into cells. The
XX ribozyme is resistant to endonuclease activity and hence is efficient in
XX restenosis treatment
XX
XX Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 976 CGAGACCTCAAGCCCGAGA 994
XX
XX 1 CGAGACCTTAAACCTCAGA 19
XX
XX
XX RESULT 637
XX AAA82662
XX ID AAA82662 standard; DNA; 19 BP.
XX
XX AC AAA82662;
XX
XX 04-DEC-2000 (first entry)
XX
XX cdk2 ribozyme binding site #99.
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX Mammalia.
XX
XX WO2000032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
XX Disclosure; Page 49; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
XX designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
XX other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
XX Representative examples of ribozyme recognition sites are given in
XX AAA82415 to AAA86787. The ribozyme of the invention is useful for
XX inhibiting restenosis by introduction of the ribozyme into cells. The
XX ribozyme is resistant to endonuclease activity and hence is efficient in
XX restenosis treatment
XX
XX Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

QY 1167 GGGCTGCATCTTCTATGAG 1185  
 DB 1 GGGCTGCATCTTGTCTGAG 19

RESULT 638  
 AAA82664  
 ID AAA82664 standard; DNA; 19 BP.  
 XX  
 AC AAA82664;  
 XX  
 DT 04-DEC-2000 (first entry)  
 XX  
 DE cdk2 ribozyme binding site #101.  
 XX  
 KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
 XX  
 OS Mammalia.

PN WO200032765-A2.  
 XX  
 PD 08-JUN-2000.  
 XX  
 PF 06-DEC-1999; 99WO-US028772.  
 XX  
 PR 04-DEC-1998; 98US-0110954P.  
 XX  
 PA (IMMU-) IMMUSOL INC.  
 XX  
 PI Tritz R, Welch PJ, Barber JR, Robbins JM;  
 XX  
 DR WPI; 2000-412314/35.  
 XX  
 PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
 PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
 PT PCNA and Cyclin B1.  
 XX  
 PS Disclosure; Page 49; 109pp; English.  
 XX  
 CC The present invention relates to a hairpin or hammerhead ribozyme,  
 CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
 CC Representative examples of ribozyme recognition sites are given in  
 CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
 CC inhibiting restenosis by introduction of the ribozyme into cells. The  
 CC ribozyme is resistant to endonuclease activity and hence is efficient in  
 CC restenosis treatment  
 XX  
 SQ Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1170 CTGCATCTTCTATGAGATG 1188  
 DB 1 CTGCATCTTGTCTGAGATG 19

RESULT 639  
 AAA83089  
 ID AAA83089 standard; DNA; 19 BP.  
 XX  
 AC AAA83089;  
 XX  
 DT 04-DEC-2000 (first entry)  
 XX  
 DE cdk7 ribozyme binding site #10.  
 XX  
 KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
 XX  
 OS Mammalia.

XX WO200032765-A2.  
 XX  
 PD 08-JUN-2000.  
 XX  
 PF 06-DEC-1999; 99WO-US028772.  
 XX  
 PR 04-DEC-1998; 98US-0110954P.  
 XX  
 PA (IMMU-) IMMUSOL INC.  
 XX  
 PI Tritz R, Welch PJ, Barber JR, Robbins JM;  
 XX  
 DR WPI; 2000-412314/35.  
 XX  
 PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
 PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
 PT PCNA and Cyclin B1.  
 XX  
 PS Disclosure; Page 56; 109pp; English.  
 XX  
 CC The present invention relates to a hairpin or hammerhead ribozyme,  
 CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
 CC Representative examples of ribozyme recognition sites are given in  
 CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
 CC inhibiting restenosis by introduction of the ribozyme into cells. The  
 CC ribozyme is resistant to endonuclease activity and hence is efficient in  
 CC restenosis treatment  
 XX  
 SQ Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 651 TGGCACCGTCTACAAAGGC 669  
 DB 1 TGGCACCGTTTACAGGCC 19

RESULT 640  
 AAZ40735/C  
 ID AAZ40735 standard; DNA; 19 BP.  
 XX  
 AC AAZ40735;  
 XX  
 DT 21-FEB-2000 (first entry)  
 XX  
 DE Primer 1 used in the sequencing of VhalphatAG.

KW VhalphatAG; anti-tumour associated sialylated glycoprotein antigen;  
 KW TAG-72; variable region; heavy chain; carcinoma; detect; tumour; ss;  
 KW mouse-human chimeric antibody; therapeutic agent; intraoperative therapy;  
 KW primer.

XX Synthetic.  
 OS Mus sp.  
 XX  
 PN US5993813-A.  
 XX  
 PD 30-NOV-1999.  
 XX  
 PF 24-MAR-1997; 97US-00822028.  
 XX  
 PR 19-OCT-1988; 88US-00259943.  
 PR 24-OCT-1988; 88US-00261942.  
 PR 19-OCT-1989; 89US-00424362.  
 PR 31-MAR-1993; 93US-00040687.  
 XX  
 PA (DOWC) DOW CHEM CO.

XX Mezes PS, Gourlie BB, Schlom J, Kaplan DA, Anderson WHK;  
 PI

PI Rixon MW;  
XX WPI; 2000-038240/03.  
DR  
XX  
PT New mouse-human chimeric antibody, useful for in vivo diagnosis of  
PT cancer.  
XX  
PS Example; Col 37; 120pp; English.  
XX  
XX Primers AAZ40735-240740 are used to sequence the VhalpharAG germline  
CC gene, used in the invention. The invention relates to a new anti-tumour  
CC associated sialylated glycoprotein antigen (TAG)-72 mouse-human chimeric  
CC antibody. The variable region has a heavy chain (VH) where VH is encoded  
CC by a DNA sequence homologous to the VhalpharAG germline gene (AAZ40701).  
CC The invention includes a method for in vivo carcinoma targeting through  
CC the administration to an animal of an anti-TAG-72 mouse-human chimeric  
CC antibody produced by specific cell lines. The antibody or a fragment are  
CC conjugated to an imaging marker or therapeutic agent, in a  
CC pharmaceutically acceptable, nontoxic, sterile carrier. The chimeric  
CC antibody binds to TAG-72 which is found on certain human tumour cells.  
CC The tissue regions containing the tumours can be detected via the markers  
CC and/or can be treated via the therapeutic agents. The method is useful  
CC for in vivo diagnosis and treatment of cancer by administering to an  
CC animal an effective amount of a composition for the in situ detection of  
CC carcinoma lesions. The method is useful for intraoperative therapy,  
CC consisting of locating the position of a tumour through the  
CC administration of the antibody, followed by excising the tumour  
XX  
XX Sequence 19 BP; 4 A; 5 C; 2 G; 8 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1293 CTCACAGCAGGAGTTCAG 1311  
DB 19 GTACATGAGAGTTCAG 1  
RESULT 641  
AAF72367/c  
ID AAF72367 standard; DNA; 19 BP.  
XX  
AC AAF72367;  
XX  
DT 23-APR-2001 (first entry)  
XX  
DE PCR primer specific for IFN $\alpha$ 2 gene SEQ ID 51.  
XX  
DE Human; keratinocyte derived interferon; KDI; viral infection; lymphoma;  
KW immune system related disorder; cancer; multiple sclerosis; AIDS;  
KW hepatitis; Cryptosporidium parvum infection; leukaemia; arthritis;  
KW diabetes; allergy; chronic myelogenous leukaemia; PCR primer; ss.  
XX  
OS Synthetic.  
XX  
XX WO200107608-A1.  
PN  
XX  
PD 01-FEB-2001.  
XX  
XX 20-JAN-2000; 2000WO-US001239.  
PF  
XX  
XX 21-JUL-1999; 99US-00358587.  
PR  
XX 21-JUL-1999; 99WO-US016424.  
XX  
XX (HUKA-) HUMAN GENOME SCI INC.  
PA  
XX  
XX Ruben SM, Moore PA, Lafleur DW;  
PI  
XX  
XX WPI; 2001-138557/14.  
DR  
XX  
XX Isolated keratinocyte derived interferon protein and polynucleotide used  
PT to prevent, treat or ameliorate an immune system-related disorder, viral  
PT

PT infection, viral exposure and cancer.  
XX  
PS Example 5; Page 187; 303pp; English.  
XX  
XX This invention relates to human polynucleotide sequence AAF72333 which  
CC encodes keratinocyte derived interferon (KDI) protein AAB49774, which is  
CC a member of the interferon family. AAF72338 represents the codon  
CC optimised sequence of KDI. The human KDI gene is located on chromosome 9.  
CC The specification includes KDI related protein sequences AAB49775 -  
CC AAB49789. Also given in the specification are primer, probe and  
CC polynucleotide sequences represented by AAF72334-AAF72370 (excluding  
CC AAF72338) which are used in the isolation and characterisation of the KDI  
CC sequence of the invention. The KDI polypeptide is used to treat viral  
CC infections and the protein and polynucleotide may be used to prevent,  
CC treat or ameliorate a medical condition such as immune system-related  
CC disorder, viral infection, viral exposure and cancer in a mammal.  
CC Specific disorders which can be treated by KDI include multiple  
CC sclerosis, lymphoma, acquired immune deficiency syndrome, viral  
CC hepatitis, Cryptosporidium parvum infection, chronic myelogenous  
CC leukaemia, arthritis, diabetes and allergies  
XX  
XX Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 926 TCCAGCTGCTCCGTGGCCT 944  
DB 19 TCAGCTGCTCTGGGCT 1  
RESULT 642  
AAF91206/c  
ID AAF91206 standard; DNA; 19 BP.  
XX  
AC AAF91206;  
XX  
DT 04-MAY-2001 (first entry)  
XX  
XX Human multi drug resistance-1 gene related sequence SEQ ID NO: 293.  
DE  
XX Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;  
KW inflammatory disease; neuronal disease; CNS disease;  
KW cardiovascular disease; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200109183-A2.  
PN  
XX  
PD 08-FEB-2001.  
XX  
XX 28-JUL-2000; 2000WO-EF007314.  
PF  
XX  
XX 30-JUL-1999; 99EP-00114938.  
PR  
XX 22-FEB-2000; 2000EP-00103361.  
XX  
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
PA  
XX  
XX Brinkmann U, Hoffmeyer S, Eichelbaum M, Roots I;  
PI  
XX  
XX WPI; 2001-159855/16.  
DR  
XX  
XX New polynucleotide encoding a molecular variant Multi Drug Resistance  
PT (MDR)-1 polypeptide is useful for diagnosing and treating diseases  
PT associated with abnormal MDR-1 expression or function, e.g. cancer.  
XX  
XX Claim 1; Page 137; 154pp; English.  
PS  
XX  
XX The present invention provides nucleotides encoding molecular variants of  
CC the human multi drug resistance-1 (MDR-1) protein. These can be used to  
CC identify compounds capable of treating multidrug resistance and  
CC sensitivity interfering resulting from polymorphisms in MDR-1, which can

CC lead to difficulties in treating cancer, cardiovascular, neuronal,  
 CC inflammatory and CNS diseases

SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCGAGT 406

Db 19 TCCTCTGAGGATGTCAGT 1

RESULT 643

AAH57928  
 ID AAF91205 standard; DNA; 19 BP.

XX AC AAF91205;

XX DT 04-MAY-2001 (first entry)

XX DE Human multi drug resistance-1 gene related sequence SEQ ID NO: 292.

XX KW Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;  
 KW inflammatory disease; neuronal disease; CNS disease;  
 KW cardiovascular disease; PCR primer; ss.

XX OS Homo sapiens.

XX PN WO200109183-A2.

XX PD 08-FEB-2001.

XX PF 28-JUL-2000; 2000WO-EP007314.

XX PR 30-JUL-1999; 99EP-00114938.

XX PR 22-FEB-2000; 2000EP-00103361.

XX PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX PI Brinkmann U, Hoffmeyer S, Eichelbaum M, Roots I;

XX DR WPI; 2001-159855/16.

XX PT New polynucleotide encoding a molecular variant Multi Drug Resistance  
 (MDR)-1 polypeptide is useful for diagnosing and treating diseases  
 associated with abnormal MDR-1 expression or function, e.g. cancer.

XX PS Claim 1; Page 137; 154pp; English.

XX CC The present invention provides nucleotides encoding molecular variants of  
 the human multi drug resistance-1 (MDR-1) protein. These can be used to  
 CC identify compounds capable of treating multidrug resistance and  
 CC sensitivity interfering resulting from polymorphisms in MDR-1, which can  
 CC lead to difficulties in treating cancer, cardiovascular, neuronal,  
 CC inflammatory and CNS diseases

XX SQ Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCGAGT 406

Db 1 TCCTCTGAGGATGTCAGT 19

RESULT 644

AAH57928  
 ID AAF91205 standard; DNA; 19 BP.

XX

AC AAH57928;

XX DT 10-SEP-2001 (first entry)

XX DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:352.

XX KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
 KW recognition site; target; ribozyme binding site; eye disease; vulvar;  
 KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
 KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
 KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
 KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;  
 KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
 KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
 KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
 KW sickle cell retinopathy; ss.

XX OS Homo sapiens.

XX OS Synthetic.

XX PN WO200130362-A2.

XX PD 03-MAY-2001.

XX PF 26-OCT-2000; 2000WO-US029500.

XX PR 26-OCT-1999; 99US-0161532P.

XX PA (IMMU-) IMMUSOL INC.

XX PI Robbins JM, Tritz R;

XX DR WPI; 2001-300427/31.

XX PT Treating proliferative skin or eye diseases and scarring, using ribozymes  
 that cleave RNA encoding cytokines involved in inflammation, matrix  
 metalloproteinases, growth factors and cell-cycle dependent kinases.

XX PS Example 1; Page 97; 408pp; English.

XX CC The present invention describes a method for treating a proliferative  
 skin or eye disease and scarring. The method involves administering a  
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
 CC dependent kinase, growth factor or a reductase, or administering a  
 CC nucleic acid molecule (II) comprising a promoter operably linked to a  
 CC nucleic acid segment encoding (I). (I) can have antipsoriatic,  
 CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
 CC ophthalmological, vulvar, keratolytic and virucide activities, and  
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
 CC also be used for treating proliferative eye diseases such as diabetic  
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
 CC prematurity and retinal detachment, and for treating and preventing  
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
 CC scar. AAH57577 to AAH52099 represent sequences used in the  
 CC exemplification of the present invention

XX SQ Sequence 19 BP; 2 A; 8 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1094 CACTGTGTGATCGCGCCCC 1112

Db 1 CACTGTGTGATCGCGCCCC 19

RESULT 645

AAH58160

ID AAH58160 standard; DNA: 19 BP.

AAH58160;

DT 10-SEP-2001 (first entry)

Cell-cycle dependent kinase cdk6 ribozyme binding site SEQ ID NO: 584.

Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulvurary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antiproliferative; dermatological; aniseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.

OS Homo sapiens.

**Synthetic.**

PN WO200130362-A2.

PD 03-MAY-2001.

26-OCT-2000: 2000WO-US029500.

PR 26-OCT-1999: 99US-0161532P.

PA (IMMU-) IMMUSOL INC.

PI Robbins JM. Tritz R:

WPT: 2001-300427/31

Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.

PS Example 1; Page 114; 408pp; English.

The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antiproliferatic, dermatological, cytostatic, antiseborrheic, antivascular, anti-itching, ophthalmological, vulvarary, keratolytic and virulicide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention.

Sequence 19 BP; 1 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

1028 TGGCTGACTTTGGCCTGGC 1046

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 523  
 524  
 525

RESULT 646

AAH58252

ID AAH58252 standard; DNA; 19 BP.

AC AAH58252;

DT 10-SEP-2001 (first entry)

Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO: 676.

DE Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
XX recognition site; target; ribozyme binding site; eye disease; vulvare;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cystostatic;  
KW antipsoriatic; dermatological; aniseborrheic; antidiabetic; virucide;  
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.

OS Homo sapiens.

OS Homo sapiens.

OS Synthetic.

PN WO200130362-A2.

PD 03-MAY-2001.

PF 26-OCT-2000; 2000WO-US029500.

PR 26-OCT-1999; 99US-0161532P.

PA (IMMU-) IMMUSOL INC.

PI Robbins JM, Tritz R;

DR WPI: 2001-300427/31.

Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.

PS Example 1: Page 121: 408pp: English:

The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antiproliferatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antiscaling, ophthalmological, vulvatory, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention.

Sequence 19 BP: 5 A: 7 C: 4 G: 3 T: 0 U: 0 Other: 0

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16: Conservative 0; Mismatches 3; Indels

652 GGCACCGTCTACAAAGGCA 670

QY 652 GCCACCGTCTACAAAGGCCA 19  
db 1 GCCACCGTTTACAAGGCCA 19



RESULT 647  
AAH58251  
ID AAH58251 standard; DNA; 19 BP.  
XX AC  
XX AAH58251;  
XX AC  
DT 10-SEP-2001 (first entry)  
XX DT  
DE Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:675.  
XX DE  
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
KW recognition site; target; ribozyme binding site; eye disease; vulnery;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; WMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
KW antipsoriatic; dermatological; aniseborrheic; antidiabetic; virucide;  
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.  
XX KW  
OS Homo sapiens.  
OS Synthetic.  
XX OS  
PN WO200130362-A2.  
XX PN  
XX 03-MAY-2001.  
XX PD  
XX 26-OCT-2000; 2000WO-US029500.  
XX PF  
XX 26-OCT-1999; 99US-0161532P.  
XX PR  
XX (IMMU-) IMMUSOL INC.  
XX PA  
XX Robbins JM, Tritz R;  
XX PI  
XX WPI; 2001-300427/31.  
XX DR  
XX  
PT Treating proliferative skin or eye diseases and scarring, using ribozymes  
PT that cleave RNA encoding cytokines involved in inflammation, matrix  
PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
XX PT  
XX Example 1; Page 121; 408pp; English.  
XX PS  
CC The present invention describes a method for treating a proliferative  
CC skin or eye disease and scarring. The method involves administering a  
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
CC dependent kinase, growth factor or a reductase, or administering a  
CC nucleic acid molecule (II) comprising a promoter operably linked to a  
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
CC ophthalmological, vulnery, keratolytic and virucide activities, and  
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic  
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention  
XX CC  
SQ Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
951 TGCCACCGTCTACAAAGGC 669

Db 1 TGCCACCGTCTACAGGCC 19  
RESULT 648  
AAH58057  
ID AAH58057 standard; DNA; 19 BP.  
XX AC  
XX AAH58057;  
XX AC  
DT 10-SEP-2001 (first entry)  
XX DT  
DE Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:481.  
XX DE  
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
KW recognition site; target; ribozyme binding site; eye disease; vulnery;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; WMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;  
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.  
XX KW  
OS Homo sapiens.  
OS Synthetic.  
XX OS  
PN WO200130362-A2.  
XX PN  
XX 03-MAY-2001.  
XX PD  
XX 26-OCT-2000; 2000WO-US029500.  
XX PF  
XX 26-OCT-1999; 99US-0161532P.  
XX PR  
XX (IMMU-) IMMUSOL INC.  
XX PA  
XX Robbins JM, Tritz R;  
XX PI  
XX WPI; 2001-300427/31.  
XX DR  
XX  
PT Treating proliferative skin or eye diseases and scarring, using ribozymes  
PT that cleave RNA encoding cytokines involved in inflammation, matrix  
PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
XX PT  
XX Example 1; Page 107; 408pp; English.  
XX PS  
CC The present invention describes a method for treating a proliferative  
CC skin or eye disease and scarring. The method involves administering a  
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
CC dependent kinase, growth factor or a reductase, or administering a  
CC nucleic acid molecule (II) comprising a promoter operably linked to a  
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
CC ophthalmological, vulnery, keratolytic and virucide activities, and  
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic  
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention  
XX CC  
SQ Sequence 19 BP; 2 A; 2 C; 8 G; 7 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1158 GTGGGTTGGGTGCATC 1176  
 ||||| ||||| ||||| |||||  
 Db 1 GTGGAGTTGGGTGCATC 19

## RESULT 649

AAH57792

ID AAH57792 standard; DNA; 19 BP.

XX AC

XX AAH57792;

XX DT

XX 10-SEP-2001 (first entry)

XX DE

XX Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:216.

KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
 KW recognition site; target; ribozyme binding site; eye disease; vulnary;  
 KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
 KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
 KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
 KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;  
 KW antisking; ophthalmological; keratolytic; gene therapy; viral wart;  
 KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
 KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
 KW sickle cell retinopathy; ss.

XX Homo sapiens.

OS Synthetic.

XX Xx

XX WO200130362-A2.

XX PN

XX 03-MAY-2001.

XX PD

XX 26-OCT-2000; 2000WO-US029500.

XX PF

XX 26-OCT-1999; 99US-0161532P.

XX PR

XX (IMMU-) IMMUSOL INC.

XX PA

XX Robbins JM, Tritz R;

XX PI

XX WPI; 2001-300427/31.

XX DR

XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
 PT that cleave RNA encoding cytokines involved in inflammation, matrix  
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.

PS Example 1; Page 87; 408pp; English.

CC The present invention describes a method for treating a proliferative  
 CC skin or eye disease and scarring. The method involves administering a  
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
 CC dependent kinase, growth factor or a reductase, or administering a  
 CC nucleic acid molecule (II) comprising a promoter operably linked to a  
 CC nucleic acid segment encoding (I). (I) can have antiproliferative,  
 CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisking,  
 CC ophthalmological, vulnary, keratolytic and virucide activities, and  
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
 CC also be used for treating proliferative eye diseases such as diabetic  
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
 CC prematurity and retinal detachment, and for treating and preventing  
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
 CC scar. AAH57577 to AAH62099 represent sequences used in the  
 CC exemplification of the present invention

SQ Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 975 CCGAGACCTCAAGCCCCAG 993

||||| ||||| ||||| |||||

Db 1 CCGAGACCTTAAACCTCAG 19

## RESULT 650

AAH57793

ID AAH57793 standard; DNA; 19 BP.

XX AC

XX AAH57793;

XX DT

XX 10-SEP-2001 (first entry)

XX DE

XX Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:217.

XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
 KW recognition site; target; ribozyme binding site; eye disease; vulnary;  
 KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
 KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
 KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
 KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;  
 KW antisking; ophthalmological; keratolytic; gene therapy; viral wart;  
 KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
 KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
 KW sickle cell retinopathy; ss.

XX Homo sapiens.

OS Synthetic.

XX Xx

XX WO200130362-A2.

XX PN

XX 03-MAY-2001.

XX PD

XX 26-OCT-2000; 2000WO-US029500.

XX PF

XX 26-OCT-1999; 99US-0161532P.

XX PR

XX (IMMU-) IMMUSOL INC.

XX PA

XX Robbins JM, Tritz R;

XX PI

XX WPI; 2001-300427/31.

XX DR

XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
 PT that cleave RNA encoding cytokines involved in inflammation, matrix  
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.

PS Example 1; Page 87; 408pp; English.

CC The present invention describes a method for treating a proliferative  
 CC skin or eye disease and scarring. The method involves administering a  
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
 CC dependent kinase, growth factor or a reductase, or administering a  
 CC nucleic acid molecule (II) comprising a promoter operably linked to a  
 CC nucleic acid segment encoding (I). (I) can have antiproliferative,  
 CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisking,  
 CC ophthalmological, vulnary, keratolytic and virucide activities, and  
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
 CC also be used for treating proliferative eye diseases such as diabetic  
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
 CC prematurity and retinal detachment, and for treating and preventing  
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
 CC scar. AAH57577 to AAH62099 represent sequences used in the  
 CC exemplification of the present invention

SQ Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. NO. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 976 CGAGACCTCAAGCCCGAGA 994  
|||||  
Db 1 CGAGACCTTAACTCAGA 19

RESULT 651  
AAH57825  
ID AAH57825 standard; DNA; 19 BP.  
XX  
AC AAH57825;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:249.  
XX  
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
KW recognition site; target; ribozyme binding site; eye disease; vulnery;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytosolic;  
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;  
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.

XX Homo sapiens.  
OS Synthetic.  
XX  
XX WO200130362-A2.  
XX  
XX 03-MAY-2001.

XX 26-OCT-2000; 2000WO-US029500.  
XX  
XX 26-OCT-1999; 99US-0161532P.  
XX  
XX (IMMU-) IMMUSOL INC.  
XX

XX Robbins JM, Tritz R;  
XX WPI; 2001-300427/31.  
XX

XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
XX that cleave RNA encoding cytokines involved in inflammation, matrix  
XX metalloproteinases, growth factors and cell-cycle dependent kinases.

XX Example 1; Page 90; 408pp; English.

XX The present invention describes a method for treating a proliferative  
XX skin or eye disease and scarring. The method involves administering a  
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in  
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
XX dependent kinase, growth factor or a reductase, or administering a  
XX nucleic acid molecule (II) comprising a promoter operably linked to a  
XX nucleic acid segment encoding (I). (I) can have antiproliferative,  
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
XX ophthalmological, vulnery, keratolytic and virucide activities, and  
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
XX in gene therapy. (I) and (II) are useful for treating proliferative skin  
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can  
XX also be used for treating proliferative eye diseases such as diabetic  
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
XX prematurity and retinal detachment, and for treating and preventing  
XX scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
XX scar. AAH57577 to AAH62099 represent sequences used in the  
XX exemplification of the present invention

XX Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. NO. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1169 GCTGCATCTTCTATGAGAT 1187  
|||||  
Db 1 GCTGCATCTTGTGAGAT 19

RESULT 652  
AAH57824  
ID AAH57824 standard; DNA; 19 BP.  
XX  
AC AAH57824;  
XX

XX 10-SEP-2001 (first entry)

XX Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:248.  
XX

XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
KW recognition site; target; ribozyme binding site; eye disease; vulnery;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytosolic;  
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;  
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.

XX Homo sapiens.  
OS Synthetic.

XX WO200130362-A2.

XX 03-MAY-2001.

XX 26-OCT-2000; 2000WO-US029500.

XX 26-OCT-1999; 99US-0161532P.

XX (IMMU-) IMMUSOL INC.

XX Robbins JM, Tritz R;

XX WPI; 2001-300427/31.

XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
XX that cleave RNA encoding cytokines involved in inflammation, matrix  
XX metalloproteinases, growth factors and cell-cycle dependent kinases.

XX Example 1; Page 90; 408pp; English.

XX The present invention describes a method for treating a proliferative  
XX skin or eye disease and scarring. The method involves administering a  
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in  
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
XX dependent kinase, growth factor or a reductase, or administering a  
XX nucleic acid molecule (II) comprising a promoter operably linked to a  
XX nucleic acid segment encoding (I). (I) can have antiproliferative,  
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
XX ophthalmological, vulnery, keratolytic and virucide activities, and  
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
XX in gene therapy. (I) and (II) are useful for treating proliferative skin  
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can  
XX also be used for treating proliferative eye diseases such as diabetic  
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
XX prematurity and retinal detachment, and for treating and preventing  
XX scarring such as keloid, adhesion and hypertrophic or hypertrophic burn

CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention  
XX  
SQ Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1167 GGCTGCACTCTCTATGAG 1185  
Db 1 GGCTGCACTCTCTGCTGAG 19

RESULT 653  
AAH57826  
ID AAH57826 standard; DNA; 19 BP.

XX AC AAH57826;

XX DT 10-SEP-2001 (first entry)

XX DE Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:250.

XX KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
KW recognition site; target; ribozyme binding site; eye disease; vulvectomy;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;  
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.

XX OS Homo sapiens.

XX OS Synthetic.

XX PN WO200130362-A2.

XX PD 03-MAY-2001.

XX PF 26-OCT-2000; 2000WO-US029500.

XX PR 26-OCT-1999; 99US-0161532P.

XX PA (IMMU-) IMMUSOL INC.

XX PI Robbins JM, Tritz R;

XX DR WPI; 2001-300427/31.

XX PT Treating proliferative skin or eye diseases and scarring, using ribozymes  
XX that cleave RNA encoding cytokines involved in inflammation, matrix  
XX metalloproteinases, growth factors and cell-cycle dependent kinases.

XX PS Example 1; Page 90; 408pp; English.

XX CC The present invention describes a method for treating a proliferative  
XX skin or eye disease and scarring. The method involves administering a  
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in  
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
XX dependent kinase, growth factor or a reductase, or administering a  
XX nucleic acid molecule (II) comprising a promoter operably linked to a  
XX nucleic acid segment encoding (I). (I) can have antiproliferative,  
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
XX ophthalmological, vulvectomy, keratolytic and virucide activities, and  
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
XX in gene therapy. (I) and (II) are useful for treating proliferative skin  
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can  
XX also be used for treating proliferative eye diseases such as diabetic  
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of

CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
XX exemplification of the present invention

SQ Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1170 CTGCATCTCTATGAGATG 1188  
Db 1 CTGCATCTCTGCTGAGATG 19

RESULT 654

ABL88859

ID ABL88859 standard; DNA; 19 BP.

XX AC ABL88859;

XX DT 22-MAY-2002 (first entry)

XX DE HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:81.

XX KW Binding molecule; HIV-1; human immunodeficiency virus type 1;  
KW reverse transcriptase; binding group; ss.

XX OS Human immunodeficiency virus 1.

XX OS Synthetic.

XX PN EP1174518-A1.

XX PD 23-JAN-2002.

XX PF 20-JUL-2000; 2000EP-00202611.

XX PR 20-JUL-2000; 2000EP-00202611.

XX PA (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.

XX PI Loukachov VV, Van Gemen B, Goudsmit J;

XX DR WPI; 2002-156696/21.

XX PT Collection of binding groups for determining or typing samples,  
XX especially clinical samples, has groups capable to identify essentially  
XX all members of the family of nucleic acids of relatively high  
XX significance.

XX PS Disclosure; Page 26; 166pp; English.

XX CC The present invention describes a collection of binding groups for a  
XX family of nucleic acids comprising members of relatively high and relative  
XX low significance, where the binding groups are selected to be capable to  
XX identify, alone or in combination, essentially all members of the family  
XX of nucleic acids of relatively high significance. The collection of  
XX binding groups is useful for typing of nucleic acid in a clinical sample,  
XX by contacting the nucleic acid with the collection and determining  
XX whether one or more binding groups bound to the nucleic acid of the  
XX sample. This method is useful for determining whether the sample  
XX comprises at least a part of a member of relatively high significance  
XX of a family of nucleic acids. The collection of binding groups is useful for  
XX diagnosing the severity of a disease caused by a pathogen containing a  
XX member of a family of nucleic acids. ABL88779 to ABL89321 represent  
XX oligonucleotide sequences used in the exemplification of the present  
XX invention

SQ Sequence 19 BP; 8 A; 4 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;

```
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1505 CCATATTGCACTAAGGA 1523
DB 1 CCATATTGCCATAAGAA 19

RESULT 655
ABL88857
ID ABL88857 standard; DNA; 19 BP.
XX
XX ABL88857;
XX
XX 22-MAY-2002 (first entry)
XX
XX HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:79.
XX
XX Binding molecule; HIV-1; human immunodeficiency virus type 1;
XX reverse transcriptase; binding group; ss.
XX
XX Human immunodeficiency virus 1.
XX Synthetic.
XX
XX EP1174518-A1.
XX
XX 23-JAN-2002.
XX
XX 20-JUL-2000; 2000EP-00202611.
XX
XX 20-JUL-2000; 2000EP-00202611.
XX
XX (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
XX
XX Loukachov VV, Van Gemen B, Goudsmit J;
XX WPI; 2002-156696/21.
XX
XX Collection of binding groups for determining or typing samples,
XX especially clinical samples, has groups capable to identify essentially
XX all members of the family of nucleic acids of relatively high
XX significance.
XX
XX Disclosure; Page 26; 166pp; English.
XX
XX The present invention describes a collection of binding groups for a
XX family of nucleic acids comprising members of relative high and relative
XX low significance, where the binding groups are selected to be capable to
XX identify, alone or in combination, essentially all members of the family
XX of nucleic acids of relatively high significance. The collection of
XX binding groups is useful for typing of nucleic acid in a clinical sample,
XX by contacting the nucleic acid with the collection and determining
XX whether one or more binding groups bound to the nucleic acid of the
XX sample. This method is useful for determining whether the sample
XX comprises at least a part of a member of relatively high significance of
XX a family of nucleic acids. The collection of binding groups is useful for
XX diagnosing the severity of a disease caused by a pathogen containing a
XX member of a family of nucleic acids. ABL88779 to ABL89321 represent
XX oligonucleotide sequences used in the exemplification of the present
XX invention
XX
XX Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1505 CCATATTGCACTAAGGA 1523
DB 1 CCATATTGCCATAAGGA 19

RESULT 656
ABL88851
ID ABL88851 standard; DNA; 19 BP.
XX
XX ABL88851;
XX
XX 22-MAY-2002 (first entry)
XX
XX HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:73.
XX
XX Binding molecule; HIV-1; human immunodeficiency virus type 1;
XX reverse transcriptase; binding group; ss.
XX
XX Human immunodeficiency virus 1.
XX Synthetic.
XX
XX EP1174518-A1.
XX
XX 23-JAN-2002.
XX
XX 20-JUL-2000; 2000EP-00202611.
XX
XX 20-JUL-2000; 2000EP-00202611.
XX
XX (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
XX
XX Loukachov VV, Van Gemen B, Goudsmit J;
XX WPI; 2002-156696/21.
XX
XX Collection of binding groups for determining or typing samples,
XX especially clinical samples, has groups capable to identify essentially
XX all members of the family of nucleic acids of relatively high
XX significance.
XX
XX Disclosure; Page 24; 166pp; English.
XX
XX The present invention describes a collection of binding groups for a
XX family of nucleic acids comprising members of relative high and relative
XX low significance, where the binding groups are selected to be capable to
XX identify, alone or in combination, essentially all members of the family
XX of nucleic acids of relatively high significance. The collection of
XX binding groups is useful for typing of nucleic acid in a clinical sample,
XX by contacting the nucleic acid with the collection and determining
XX whether one or more binding groups bound to the nucleic acid of the
XX sample. This method is useful for determining whether the sample
XX comprises at least a part of a member of relatively high significance of
XX a family of nucleic acids. The collection of binding groups is useful for
XX diagnosing the severity of a disease caused by a pathogen containing a
XX member of a family of nucleic acids. ABL88779 to ABL89321 represent
XX oligonucleotide sequences used in the exemplification of the present
XX invention
XX
XX Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
ID ABL88851 standard; DNA; 19 BP.
XX
XX ABL88851;
XX
XX 22-MAY-2002 (first entry)
XX
XX HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:73.
XX
XX Binding molecule; HIV-1; human immunodeficiency virus type 1;
XX reverse transcriptase; binding group; ss.
XX
XX Human immunodeficiency virus 1.
XX Synthetic.
XX
XX EP1174518-A1.
XX
XX 23-JAN-2002.
XX
XX 20-JUL-2000; 2000EP-00202611.
XX
XX 20-JUL-2000; 2000EP-00202611.
XX
XX (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
XX
XX Loukachov VV, Van Gemen B, Goudsmit J;
XX WPI; 2002-156696/21.
XX
XX Collection of binding groups for determining or typing samples,
XX especially clinical samples, has groups capable to identify essentially
XX all members of the family of nucleic acids of relatively high
XX significance.
XX
XX Disclosure; Page 24; 166pp; English.
XX
XX The present invention describes a collection of binding groups for a
XX family of nucleic acids comprising members of relative high and relative
XX low significance, where the binding groups are selected to be capable to
XX identify, alone or in combination, essentially all members of the family
XX of nucleic acids of relatively high significance. The collection of
XX binding groups is useful for typing of nucleic acid in a clinical sample,
XX by contacting the nucleic acid with the collection and determining
XX whether one or more binding groups bound to the nucleic acid of the
XX sample. This method is useful for determining whether the sample
XX comprises at least a part of a member of relatively high significance of
XX a family of nucleic acids. The collection of binding groups is useful for
XX diagnosing the severity of a disease caused by a pathogen containing a
XX member of a family of nucleic acids. ABL88779 to ABL89321 represent
XX oligonucleotide sequences used in the exemplification of the present
XX invention
XX
XX Sequence 19 BP; 10 A; 2 C; 2 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1505 CCATATTGCACTAAGGA 1523
DB 1 CCATATTGCCATAAGAA 19

RESULT 657
AAD36056/C
ID AAD36056 standard; DNA; 19 BP.
XX
XX AAD36056;
XX
XX 09-AUG-2002 (first entry)
XX
XX Rabbit skeletal muscle MLCK DNA amplifying downstream primer.
XX
XX Rabbit; cardiac myosin light chain kinase; cMLCK; tricuspid valve;
```

cardiac dysfunction; systolic dysfunction; mitral valve prolapse;  
 diastolic dysfunction; cardiac hypertrophy; tricuspid insufficiency;  
 coronary heart disease; myocardial infarction; mitral insufficiency;  
 valvular heart disease; congestive heart failure; mitral valve;  
 cardiomyopathy; cardiac; PCR; primer; ss.

Oryctolagus cuniculus.

WO200224889-A2.

28-MAR-2002.

12-SEP-2001; 2001WO-US028639.

12-SEP-2000; 2000US-0232246P.

13-SEP-2000; 2000US-0232456P.

(USSH ) US DEPT HEALTH & HUMAN SERVICES.

Epstein ND, Hassanzadeh S, Winitzky S, Davis JS;  
 WPI; 2002-394135/42.

New isolated cardiac myosin light chain kinase (cMLCK) protein, useful  
 for identifying cMLCK modulators that are used for treating cardiac  
 dysfunction e.g. systolic or diastolic dysfunction, myocardial  
 infarction.

Disclosure; Page 28; 105pp; English.

The invention relates to cDNA, protein sequence and genomic structure of  
 the human cardiac isoform of myosin light chain kinase (cMLCK) and  
 mutations in cMLCK gene that are associated with cardiac dysfunction. The  
 invention also relates to methods for identifying agents that modulate  
 cMLCK activity. cMLCK is useful for detecting enhanced susceptibility of  
 a subject to cardiac dysfunction. cMLCK is useful for screening for an  
 agent that modulates its biological activity. The method is useful for  
 enhancing or preserving cardiac function in a subject having cardiac  
 dysfunction, and harbouring a mutation in cMLCK allele. The method is  
 useful for enhancing or preserving cardiac function in a subject having  
 cardiac dysfunction such as systolic dysfunction, diastolic dysfunction,  
 cardiac hypertrophy, cardiomyopathy, coronary heart disease, myocardial  
 infarction, or congestive heart failure, or for preserving cardiac  
 function, or cardiac dysfunction which comprises valvular heart disease  
 such as mitral valve disease, tricuspid valve disease, mitral  
 insufficiency, tricuspid insufficiency, or mitral valve prolapse. The  
 method is useful for treating cardiac dysfunction, e.g., systolic or  
 diastolic dysfunction, coronary heart disease, cardiac hypertrophy,  
 cardiomyopathy, myocardial infarction, or congestive heart failure. The  
 present sequence is a PCR primer used to amplify rabbit skeletal muscle  
 cMLCK DNA

Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 969 GCTACACCGAGACCTCAAG 987  
 |||||  
 Db 19 GCTGACCTGGACCTCAAG 1

RESULT 658  
 ACC47620  
 ID ACC47620 standard; DNA; 19 BP.  
 XX  
 AC ACC47620;  
 XX  
 DT 11-SEP-2003 (first entry)  
 XX  
 DE Mucor circinelloides carP PCR primer #62, SEQ ID NO:6.

Beta-carotene; biosynthesis; biosynthetic pathway; carotenoid;  
 Blakeslea trispora; carP; bifunctional enzyme; lycopene cyclase;  
 phytoene synthase; carB; phytoene dehydrogenase; PCR; primer; ss.

Mucor circinelloides.

WO2003027293-A1.

03-APR-2003.

26-SEP-2002; 2002WO-ES000452.

26-SEP-2001; 2001ES-00002161.

(ANTI ) ANTIBIOTICOS SAU.

Rodriguez Saiz M, Marcos Rodriguez AT, Diez Garcia B;  
 De La Fuente Moreno JL, Barredo Fuente JL;  
 WPI; 2003-313642/30.

New carP and carB genes from Blakeslea trispora, useful for increasing  
 production of beta-carotene or other carotenoids, also related vectors  
 and polypeptides.

Example 2; Page 41; 50pp; Spanish.

The invention relates to beta-carotene biosynthetic genes from the fungus  
 Blakeslea trispora. The carP gene (ACC47617) encodes a bifunctional  
 enzyme, lycopene cyclase/phytoene synthase (ABP97464), and the carB gene  
 (ACC47618) encodes phytoene dehydrogenase (ABP97465). The invention also  
 encompasses plasmids for the expression of additional copies of these genes,  
 and plasmids for the expression of heterologous genes under the control  
 of the carP or the carB promoter. The carP and carB genes can be  
 overexpressed to increase production of beta-carotene in B. trispora, or  
 to modify the beta-carotene biosynthetic pathway to create B. trispora  
 strains able to produce other carotenoids such as lycopene. The promoters  
 of these genes may also be used to control expression of heterologous  
 genes such as the Streptococcus hindustanus bleomycin resistance  
 gene (bleR) in B. trispora. Sequences ACC47619-ACC47620 represent Mucor  
 circinelloides carP PCR primers used to generate a probe used in the  
 isolation of Blakeslea trispora DNA fragments containing both the carP  
 and carB genes in an example from the invention

Sequence 19 BP; 4 A; 9 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1354 CACGCACCGCGCTTGATA 1372  
 |||||  
 Db 1 CACGCACCGCGCTTGACA 19

RESULT 659  
 AAL53983  
 ID AAL53983 standard; DNA; 19 BP.  
 XX  
 AC AAL53983;  
 XX  
 DT 18-FEB-2003 (first entry)  
 XX  
 DE Human serotonin 1B receptor gene PCR primer, SEQ ID NO 7.

Single nucleotide polymorphism; analgesic; variant allele; A-161T;  
 human serotonin 1B receptor gene; addictive disease; neurologic;  
 psychiatric condition; pain reliever; analgesia; PCR; primer; ss.

Homo sapiens.

US2002142312-A1.

```

PD 03-OCT-2002.
XX
XX 15-MAY-2001; 2001US-00855991.
XX
XX 15-MAY-2000; 2000US-0204169P.
XX
XX (CIGL//) CIGLER T.
XX (LAFO//) LAFORGE K S.
XX (KREE//) KREEK M J.
XX
XX Cigler T, Laforge KS, Kreek MJ;
XX WPI; 2003-102507/09.
XX
XX Novel isolated variant allele of human serotonin 1B receptor gene useful
XX for determining susceptibility to addictive, neurologic or psychiatric
XX conditions or diseases in a subject.
XX
XX Example; Page 12; 20pp; English.
XX
XX The invention relates to a novel isolated variant allele of the human
XX serotonin 1B receptor gene, comprising a DNA sequence having a variation
XX in a sequence of 1749 base pairs defined in the specification, where the
XX variation comprises A-161T. The human serotonin 1B receptor gene is
XX useful for determining a susceptibility in a subject to at least one
XX addictive disease, neurologic or psychiatric condition or disease. The
XX addictive disease comprises opioid addiction, cocaine addiction, or
XX addiction to other psychostimulants, nicotine addiction, barbiturate or
XX sedative hypnotic addiction, anxiolytic addiction, or alcohol addiction.
XX The neurologic or psychiatric condition or disease is anxiety,
XX depression, pathological aggression, or compulsive gambling. The human
XX serotonin 1B receptor gene is also useful for determining a therapeutic
XX amount of pain reliever to administer to the subject in order to induce
XX analgesia. This polynucleotide sequence represents a PCR primer of the
XX human serotonin 1B receptor gene of the invention
XX
XX Sequence 19 BP; 7 A; 2 C; 9 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX Qy 124 ATGGATCGGATGAAGAAGA 142
XX ||||| ||||| ||||| |||||
XX Db 1 ATGGAGCGGACGAGGAGA 19
XX
XX RESULT 660
XX ABT21583
XX ID ABT21583 standard; DNA; 19 BP.
XX AC ABT21583;
XX
XX 16-APR-2003 (first entry)
XX
XX Multiplex group PCR primer #330.
XX
XX Racing potential; horse; grandpaternal DNA; over-represented; breeding;
XX grandmother; performance; progeny horse; PCR; primer; ss.
XX
XX Unidentified.
XX
XX WO200292851-A2.
XX
XX 21-NOV-2002.
XX
XX 15-MAY-2002; 2002WO-GB002273.
XX
XX 15-MAY-2001; 2001GB-00011886.
XX (ANIM-) ANIMAL HEALTH TRUST.
XX (BRHO-) BRITISH HORSE RACING BOARD.
XX

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PI Binns MM, Swinburne JE;
XX
XX DR WPI; 2003-129314/12.
XX
XX Determining the racing potential of a horse comprises measuring whether
XX grandpaternal or grandmaternal DNA from the selected grandmother DNA is
XX over-represented in the genome of the horse.
XX
XX Example 2; Page 25; 49pp; English.
XX
XX The invention relates to a novel method for determining racing potential
XX of a horse. The method comprises measuring: whether grandpaternal DNA is
XX over-represented in the genome of the horse; or in the case where one of
XX the grandmothers was selected for breeding on the basis of racing
XX performance, whether grandmaternal DNA from the selected grandmother is
XX over-represented in the genome of the horse which indicates that the
XX horse has good racing potential. The method of the invention is useful
XX for determining the racing potential of a horse or for obtaining a
XX progeny horse with good racing potential. This polynucleotide sequence
XX represents a PCR primer used in the detection method of over-
XX representation of DNA from male grandparents of the invention
XX
XX Sequence 19 BP; 5 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX Qy 194 CCAATGGTCCCTCTGAGCA 212
XX ||||| ||||| ||||| |||||
XX Db 1 CCAATGGTCCCTCTGAGAA 19
XX
XX RESULT 661
XX ABX11035/c
XX ID ABX11035 standard; DNA; 19 BP.
XX AC ABX11035;
XX
XX 17-APR-2003 (first entry)
XX
XX Human IFNa2 specific PCR primer #2 used in quantitative PCR reaction.
XX
XX Human; keratinocyte derived interferon; KDI; immune system disorder;
XX inflammation; cancer; blood disorder; cardiovascular disorder;
XX cerebrovascular disease; wound; neurological disease; viral infection;
XX bacterial infection; blood vessel growth inhibition; immunomodulatory;
XX antiinflammatory; vasotropic; haemostatic; cardiac; vulnerrary;
XX cerebroprotective; nootropic; neuroprotective; antibacterial; virucide;
XX antiarteriosclerotic; cytostatic; quantitative PCR; QPCR; IFNa2; primer;
XX ss.
XX
XX Homo sapiens.
XX
XX US6472512-B1.
XX
XX 29-OCT-2002.
XX
XX 20-JUL-2001; 2001US-00908594.
XX
XX 21-JUL-1998; 98US-0093643P.
XX 21-JUL-1999; 99US-00358587.
XX 21-JUL-1999; 99WO-US016424.
XX 20-JAN-2000; 2000US-00487792.
XX 20-JAN-2000; 2000WO-US001239.
XX 21-JUL-2000; 2000US-0219621P.
XX 24-MAY-2001; 2001US-0292934P.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
XX
XX Lafleur DW, Moore PA, Ruben SM;
XX
XX WPI; 2003-227870/22.
XX

```

XX New isolated antibody that binds a keratinocyte derived interferon (KDI)  
PT protein, for the diagnosis, prevention and treatment of disorders with  
PT aberrant expression of the KDI protein, such as disorders of the immune  
PT system.  
XX  
PS Example 5; Col 166; 147pp; English.  
XX  
CC The present invention relates to the isolation of human keratinocyte  
CC derived interferon (KDI) protein, and the polynucleotide sequences  
CC encoding it. The gene encoding human KDI maps to chromosome 9. The novel  
CC KDI protein is a member of the interferon family. The invention also  
CC describes vectors, host cells, and recombinant methods for producing the  
CC KDI protein. The invention also discloses methods for identifying  
CC agonists and antagonists of KDI activity. An antibody that binds to the  
CC KDI protein, the KDI polypeptide sequence, and the polynucleotide  
CC sequence encoding KDI are useful in the diagnosis, prevention and  
CC treatment of disorders associated with the aberrant expression of the KDI  
CC protein, such as disorders of the immune system, inflammation, cancer,  
CC blood disorders, cardiovascular disorders, cerebrovascular diseases,  
CC wounds, neurological diseases, bacterial or viral infections and blood  
CC vessel growth inhibition. The present sequence represents a PCR primer  
CC used in a quantitative PCR (QPCR) reaction in the examples of the present  
CC invention  
XX  
SQ Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 926 TCACGCTGCTCGTGCGCT 944  
DB 19 TCACGCTGCTCGTGCGCT 1  
RESULT 662  
ACF62640  
ID ACF62640 standard; DNA; 19 BP.  
XX ACF62640;  
AC ACF62640;  
XX 08-OCT-2003 (first entry)  
XX  
DE Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:469.  
XX  
KW Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;  
KW cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;  
KW cytostatic; PCR primer; ss.  
XX Synthetic.  
OS  
XX WO2003013534-A2.  
PN  
XX  
XX 20-FEB-2003.  
PD  
XX  
XX 23-JUL-2002; 2002WO-EP008219.  
PF  
XX  
XX 23-JUL-2001; 2001EP-00117608.  
PR  
XX 24-MAY-2002; 2002EP-00011710.  
PR  
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
PA  
XX Heinrich G, Kerb R;  
XX  
XX WPI; 2003-268144/26.  
DR  
XX  
XX New use of irinotecan for preparation of compositions for treating cancer  
PT in subject having genome with variant allele comprising cytochrome p450,  
PT subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.  
XX  
XX Disclosure; Page 44; 86pp; English.  
XX

CC The present invention describes the use of irinotecan (I) or its  
CC derivative for the preparation of a pharmaceutical composition for  
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic  
CC cancer, or malignant glioma in a subject having a genome with a variant  
CC allele which comprises a cytochrome p450, subfamily IIIA (nifedipine  
CC oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have  
CC cytostatic activity. The therapeutic applications of (I) is improved,  
CC since it is possible to individually treat a subject with an appropriate  
CC dosage and/or an appropriate derivative of (I). Therefore, undesirable,  
CC harmful or toxic effects are efficiently avoided. Unnecessary and  
CC potentially harmful treatment of those subjects who do not respond to the  
CC treatment with substances (nonresponders), as well as the development of  
CC drug resistances due to suboptimal drug dosing can be avoided. ACF62200  
CC to ACF62751 and ABX34912 to ABM35013 represent sequences used in the  
CC exemplification of the present invention  
XX  
SQ Sequence 19 BP; 3 A; 4 C; 6 G; 0 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 388 TCCTCGGATGAGTGCGCT 406  
DB 1 TCCTCGGATGAGTGCGCT 19  
RESULT 663  
ACF62641/c  
ID ACF62641 standard; DNA; 19 BP.  
XX ACF62641;  
AC ACF62641;  
XX 08-OCT-2003 (first entry)  
XX  
DE Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:470.  
XX  
KW Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;  
KW cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;  
KW cytostatic; PCR primer; ss.  
XX Synthetic.  
OS  
XX WO2003013534-A2.  
PN  
XX  
XX 20-FEB-2003.  
PD  
XX  
XX 23-JUL-2002; 2002WO-EP008219.  
PF  
XX  
XX 23-JUL-2001; 2001EP-00117608.  
PR  
XX 24-MAY-2002; 2002EP-00011710.  
PR  
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
PA  
XX Heinrich G, Kerb R;  
XX  
XX WPI; 2003-268144/26.  
DR  
XX  
XX New use of irinotecan for preparation of compositions for treating cancer  
PT in subject having genome with variant allele comprising cytochrome p450,  
PT subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.  
XX  
XX Disclosure; Page 44; 86pp; English.  
XX  
XX The present invention describes the use of irinotecan (I) or its  
CC derivative for the preparation of a pharmaceutical composition for  
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic  
CC cancer, or malignant glioma in a subject having a genome with a variant  
CC allele which comprises a cytochrome p450, subfamily IIIA (nifedipine  
CC oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have  
CC cytostatic activity. The therapeutic applications of (I) is improved,  
CC since it is possible to individually treat a subject with an appropriate  
CC dosage and/or an appropriate derivative of (I). Therefore, undesirable,  
CC harmful or toxic effects are efficiently avoided. Unnecessary and  
CC potentially harmful treatment of those subjects who do not respond to the  
CC treatment with substances (nonresponders), as well as the development of  
CC drug resistances due to suboptimal drug dosing can be avoided. ACF62200  
CC to ACF62751 and ABX34912 to ABM35013 represent sequences used in the  
CC exemplification of the present invention  
XX



CC harmful or toxic effects are efficiently avoided. Unnecessary and  
CC potentially harmful treatment of those subjects who do not respond to the  
CC treatment with substances (nonresponders), as well as the development of  
CC drug resistances due to suboptimal drug dosing can be avoided. ACF62200  
CC to ACF62751 and ABW34912 to ABW35013 represent sequences used in the  
CC exemplification of the present invention

XX SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 388 TCCTCGGATGAGTGCAGT 406  
Db 19 TCCTCTGAGGATGTCAGT 1

RESULT 664

ADB21311  
ID ADB21311 standard; DNA; 19 BP.

XX AC ADB21311;

XX DT 20-NOV-2003 (first entry)

XX DE MRP1 based cancer related nucleic acid SEQ ID NO:459.

XX KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;  
XX lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;  
XX variant allele; multidrug resistance protein 1; MRP1; cytosolic; gene;  
XX ds.

XX OS Unidentified.

XX PN WO2003013533-A2.

XX PD 20-FEB-2003.

XX PF 23-JUL-2002; 2002WO-EP008200.

XX PR 23-JUL-2001; 2001EP-00117608.

XX PR 24-MAY-2002; 2002EP-00011710.

XX PA (EPID-) EPIDAUS BIOTECHNOLOGIE AG.

XX PI Heinrich G, Kerb R;

XX DR WPI; 2003-354397/33.

XX PT Use of irinotecan or its derivative for preparation of a pharmaceutical  
XX composition for treating cancer in a subject having a genome with a  
XX variant allele comprising a multidrug resistance protein 1  
XX polynucleotide.

XX PS Disclosure; Page 54; 100pp; English.

XX CC The present invention describes a method for the use of irinotecan (I) or  
XX its derivative for the preparation of a pharmaceutical composition for  
XX treating colorectal, cervical, gastric, lung, ovarian or pancreatic  
XX cancer, or malignant glioma in a subject having a genome with a variant  
XX allele which comprises a multidrug resistance protein 1 (MRP1)  
XX polynucleotide (II). (I) has cytostatic activity. (I) or its derivative  
XX can be used for the preparation of a pharmaceutical composition for  
XX treating colorectal, cervical, gastric, lung, ovarian or pancreatic  
XX cancer, or malignant glioma in a subject, where the subject is a human  
XX (preferably African or Asian) or a mouse. The present sequence represents  
XX a sequence which is used in the exemplification of the present invention.

XX SQ Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 6.9e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 388 TCCTCGGATGAGTGCAGT 406

Db 1 TCCTCTGAGGATGTCAGT 19

RESULT 665

ADB21312/c

ID ADB21312 standard; DNA; 19 BP.

XX AC ADB21312;

XX DT 20-NOV-2003 (first entry)

XX DE MRP1 based cancer related nucleic acid SEQ ID NO:470.

XX KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;  
XX lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;  
XX variant allele; multidrug resistance protein 1; MRP1; cytosolic; gene;  
XX ds.

XX OS Unidentified.

XX PN WO2003013533-A2.

XX PD 20-FEB-2003.

XX PF 23-JUL-2002; 2002WO-EP008200.

XX PR 23-JUL-2001; 2001EP-00117608.

XX PR 24-MAY-2002; 2002EP-00011710.

XX PA (EPID-) EPIDAUS BIOTECHNOLOGIE AG.

XX PI Heinrich G, Kerb R;

XX DR WPI; 2003-354397/33.

XX PT Use of irinotecan or its derivative for preparation of a pharmaceutical  
XX composition for treating cancer in a subject having a genome with a  
XX variant allele comprising a multidrug resistance protein 1  
XX polynucleotide.

XX PS Disclosure; Page 54; 100pp; English.

XX CC The present invention describes a method for the use of irinotecan (I) or  
XX its derivative for the preparation of a pharmaceutical composition for  
XX treating colorectal, cervical, gastric, lung, ovarian or pancreatic  
XX cancer, or malignant glioma in a subject having a genome with a variant  
XX allele which comprises a multidrug resistance protein 1 (MRP1)  
XX polynucleotide (II). (I) has cytostatic activity. (I) or its derivative  
XX can be used for the preparation of a pharmaceutical composition for  
XX treating colorectal, cervical, gastric, lung, ovarian or pancreatic  
XX cancer, or malignant glioma in a subject, where the subject is a human  
XX (preferably African or Asian) or a mouse. The present sequence represents  
XX a sequence which is used in the exemplification of the present invention.

XX SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 388 TCCTCGGATGAGTGCAGT 406

Db 19 TCCTCTGAGGATGTCAGT 1

RESULT 666

ACF39450/c

ID ACF39450 standard; DNA; 19 BP.

XX

```
AC ACF39450;
XX
XX 26-SEP-2003 (first entry)
XX
XX Acute lymphoblastic leukaemia assay related primer #12.
XX
XX Simultaneous detection; multiple target nucleic acid molecule;
XX biological sample; Exonuclease I; PCR; human papillomavirus; HPV;
XX BARCODE-MT; acute lymphoblastic leukaemia; cancer; assay;
XX bead array coded detection of multiple target; microarray;
XX targeted genetic risk-stratification; primer; probe; ss.
XX
XX Synthetic.
XX
XX WO2003054149-A2.
XX
XX 03-JUL-2003.
XX
XX 06-DEC-2002; 2002WO-US039223.
XX
XX 07-DEC-2001; 2001US-0338442P.
XX
XX 05-NOV-2002; 2002US-0423793P.
XX
XX (UTMA-) UNIV MASSACHUSETTS.
XX
XX Pihan G;
XX
XX WPI; 2003-559133/52.
XX
XX Simultaneously detecting the presence of multiple target nucleic acid
XX molecules in a biological sample for optimizing risk-adapted therapy for
XX a disorder by treating the enriched target nucleic acid molecules with
XX Exonuclease I.
XX
XX Example 1; Fig 6; 41pp; English.
XX
XX The present invention describes a method for simultaneously detecting the
XX presence of multiple target nucleic acid molecules in a biological sample
XX comprising: (a) isolating and enriching target nucleic acid molecules
XX from the biological sample; (b) treating the enriched target nucleic acid
XX molecules with Exonuclease I; (c) performing linear PCR on the
XX Exonuclease I treated enriched target nucleic acid molecule to produce
XX a linear PCR product where only a single primer is used; (d) obtaining
XX beads coupled to an oligonucleotide molecule complementary to the
XX amplified target nucleic acid molecules; (e) forming a mixture by mixing
XX the beads and the enriched linear PCR product nucleic acid; (f) forming a
XX reacted sample by incubating the mixture under conditions where if the
XX enriched linear PCR product includes the target nucleic acid molecule,
XX the enriched linear PCR product will hybridise to the oligonucleotide
XX molecule; (g) analysing the reacted sample by determining the
XX fluorescence of each bead analysed; and (h) detecting a level of
XX fluorescence on the beads, where the level of fluorescence corresponds to
XX a level of a target nucleic acid molecule in the biological sample. The
XX method for simultaneously detecting the presence of multiple target
XX nucleic acid molecules in a biological sample or for optimising risk-
XX adapted therapy for a disorder associated with the target nucleic acid.
XX ACF39439 to ACF39597 represent primers and probes used in the
XX exemplification of the present invention
XX
XX Sequence 19 BP; 4 A; 2 C; 10 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1674 AGCCCCCACTACATCTCTC 1692
XX |||||
XX Db 19 AGCCCCCACTCTCTCTGC 1
XX
XX RESULT 667
XX ACH03516
XX ID ACH03516 standard; DNA; 19 BP.
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1446 GAAACATCCATCTCTCTC 1464
XX |||||
XX Db 1 GATCCATCCATCTCTCCAC 19
XX
XX RESULT 668
XX ADB88401/C
XX ID ADB88401 standard; DNA; 19 BP.
XX
XX AC ADB88401;
XX
XX 04-DEC-2003 (first entry)
XX
XX Human UGT1A1 variant allele sequence fragment SEQ ID NO:442.
XX
XX ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;
XX colorectal cancer; cervical cancer; gastric cancer; lung cancer;
XX ovarian cancer; pancreatic cancer; malignant glioma;
XX uridine diphosphate glycosyltransferase1 member A1.
XX
XX Homo sapiens.
XX
XX WO2003013536-A2.
XX
XX 20-FEB-2003.
XX
```

ACH03516;  
25-SEP-2003 (first entry)  
Human latrophilin 3 (LPH3) associated primer #58.  
Human; latrophilin 3; LPH3; ophthalmological; hypotensive; gene therapy;  
eye disease; primary open-angle glaucoma; ocular hypertension;  
elevated intraocular pressure; PCR; primer; ss.  
Homo sapiens.  
US2003054347-A1.  
20-MAR-2003.  
27-APR-2001; 2001US-00844653.  
27-APR-2001; 2001US-00844653.  
(UNMI ) UNIV MICHIGAN.  
Richards JE, Rozsa FW;  
WPI; 2003-521847/49.  
New Latrophilin (LPH) polynucleotides and polypeptides, useful for  
diagnosing or treating subjects at risk for or having eye disease, e.g.  
Primary Open-Angle Glaucoma, ocular hypertension, or elevated intraocular  
pressure.  
Example 1; Page 32; 153pp; English.  
The invention describes a new composition, which comprises an isolated  
Latrophilin (LPH) nucleic acid. The compositions are useful for  
diagnosing or treating subjects at risk for or having eye disease, e.g.  
Primary Open-Angle Glaucoma (e.g. juvenile onset or adult onset), ocular  
hypertension, or elevated intraocular pressure. This sequence represents  
a primer associated with isolation of human latrophilin 3 (LPH3)  
Sequence 19 BP; 4 A; 8 C; 1 G; 6 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1446 GAAACATCCATCTCTCTC 1464  
|||  
Db 1 GATCCATCCATCTCTCCAC 19  
RESULT 668  
ADB88401/C  
ID ADB88401 standard; DNA; 19 BP.  
AC ADB88401;  
04-DEC-2003 (first entry)  
Human UGT1A1 variant allele sequence fragment SEQ ID NO:442.  
ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;  
colorectal cancer; cervical cancer; gastric cancer; lung cancer;  
ovarian cancer; pancreatic cancer; malignant glioma;  
uridine diphosphate glycosyltransferase1 member A1.  
Homo sapiens.  
WO2003013536-A2.  
20-FEB-2003.

PF 23-JUL-2002; 2002WO-EP008217.  
XX  
XX  
PR 23-JUL-2001; 2001EP-00117608.  
PR 24-MAY-2002; 2002EP-00011710.  
XX  
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
XX  
XX Heinrich G, Kerb R;  
PI  
XX WPI; 2003-289896/28.  
XX  
XX Use of irinotecan to treat cancer patient by determining if patient has  
PT variant alleles of UGT1A1 gene, administering increased/decreased amounts  
PT of irinotecan based on increased/decreased levels of UGT1A1 gene product.  
XX  
XX Disclosure; Page 58; 107pp; English.  
XX  
XX The invention relates to the novel use of irinotecan to treat a patient  
CC suffering from cancer. This involves determining if the patient has one  
CC or more variant alleles of the UGT1A1 gene, and if the patient has one  
CC or more variant alleles, irinotecan is administered in an increased  
CC or decreased amount in comparison to the amount that is administered  
CC without regard to the patient's alleles in the UGT1A1 gene. The invention  
CC has cytostatic activity. A composition of the invention acts as a  
CC topoisomerase I inhibitor. The method is useful for treating a patient,  
CC an animal e.g. mouse or a human, preferably African or Asian, suffering  
CC from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,  
CC pancreatic cancer or malignant glioma. The present sequence is used in  
CC the exemplification of the invention.  
XX  
XX Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;  
SQ  
CC The invention relates to the novel use of irinotecan to treat a patient  
CC suffering from cancer. This involves determining if the patient has one  
CC or more variant alleles of the UGT1A1 gene, and if the patient has one  
CC or more variant alleles, irinotecan is administered in an increased  
CC or decreased amount in comparison to the amount that is administered  
CC without regard to the patient's alleles in the UGT1A1 gene. The invention  
CC has cytostatic activity. A composition of the invention acts as a  
CC topoisomerase I inhibitor. The method is useful for treating a patient,  
CC an animal e.g. mouse or a human, preferably African or Asian, suffering  
CC from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,  
CC pancreatic cancer or malignant glioma. The present sequence is used in  
CC the exemplification of the invention.  
XX  
XX Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 388 TCCTCGGATGAGTGCAGT 406  
DB 19 TCCTCTGAGGATGTCAGT 1  
RESULT 669  
ADB88400  
ID ADB88400 standard; DNA; 19 BP.  
XX  
XX ADB88400;  
AC  
XX 04-DEC-2003 (first entry)  
DE  
XX Human UGT1A1 variant allele sequence fragment SEQ ID NO:441.  
XX  
XX ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;  
XX colorectal cancer; cervical cancer; gastric cancer; lung cancer;  
XX ovarian cancer; pancreatic cancer; malignant glioma;  
XX uridine diphosphate glycosyltransferase I member A1.  
XX  
XX Homo sapiens.  
OS  
XX WO2003013536-A2.  
PN  
XX 20-FEB-2003.  
PD  
XX 23-JUL-2002; 2002WO-EP008217.  
PF  
XX 23-JUL-2001; 2001EP-00117608.  
PR  
XX 24-MAY-2002; 2002EP-00011710.  
PR  
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
PA  
XX Heinrich G, Kerb R;  
PI  
XX WPI; 2003-289896/28.  
XX  
XX Use of irinotecan to treat cancer patient by determining if patient has  
PT variant alleles of UGT1A1 gene, administering increased/decreased amounts  
PT of irinotecan based on increased/decreased levels of UGT1A1 gene product.  
XX  
XX Disclosure; Page 58; 107pp; English.  
XX  
XX The invention relates to the novel use of irinotecan to treat a patient  
CC suffering from cancer. This involves determining if the patient has one  
CC or more variant alleles of the UGT1A1 gene, and if the patient has one  
CC or more variant alleles, irinotecan is administered in an increased  
CC or decreased amount in comparison to the amount that is administered  
CC without regard to the patient's alleles in the UGT1A1 gene. The invention  
CC has cytostatic activity. A composition of the invention acts as a  
CC topoisomerase I inhibitor. The method is useful for treating a patient,  
CC an animal e.g. mouse or a human, preferably African or Asian, suffering  
CC from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,  
CC pancreatic cancer or malignant glioma. The present sequence is used in  
CC the exemplification of the invention.  
XX  
XX Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 388 TCCTCGGATGAGTGCAGT 406  
DB 19 TCCTCTGAGGATGTCAGT 1  
RESULT 670  
ADB97384/C  
ID ADB97384 standard; DNA; 19 BP.  
XX  
XX ADB97384;  
AC  
XX 04-DEC-2003 (first entry)  
DE  
XX Human MDR1 variant allele sequence fragment SEQ ID NO:470.  
XX  
XX irinotecan; colorectal cancer; cervical cancer; gastric cancer;  
XX lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;  
XX multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;  
XX TOP1.  
XX  
XX Homo sapiens.  
OS  
XX WO2003013537-A2.  
PN  
XX 20-FEB-2003.  
PD  
XX 23-JUL-2002; 2002WO-EP008218.  
PF  
XX 23-JUL-2001; 2001EP-00117608.  
PR  
XX 24-MAY-2002; 2002EP-00011710.  
PR  
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
PA  
XX Heinrich G, Kerb R;  
PI  
XX WPI; 2003-268145/26.  
DR  
XX New use of irinotecan for preparation of pharmaceutical compositions for  
PT treating cancer in subject having genome with variant allele comprising  
PT multidrug resistance 1 polynucleotide.  
XX  
XX Claim 1; Page 82; 130pp; English.  
PS  
XX The invention relates to the novel use of irinotecan or its derivative  
CC for the preparation of pharmaceutical compositions for treating  
CC colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or  
CC malignant glioma in a subject having a genome with a variant allele which  
CC comprises a multidrug resistance 1 (MDR1) polynucleotide. A composition

CC of the invention has cytostatic activity. The invention is useful for the  
CC preparation of pharmaceutical compositions for treating colorectal,  
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant  
CC glioma in a subject (preferably human, more preferably African or Asian)  
CC or a mouse. The present sequence is used in the exemplification of the  
CC invention.

XX  
SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGGTGCAGT 406  
|||||  
DB 19 TCCTCTGAGGATGTGCAGT 1

RESULT 671  
ADB97383  
ID ADB97383 standard; DNA; 19 BP.  
AC ADB97383;  
XX  
DT 04-DEC-2003 (first entry)  
XX  
DE Human MDR1 variant allele sequence fragment SEQ ID NO:469.  
XX  
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;  
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;  
KW multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;  
KW TOP1.

OS Homo sapiens.  
XX  
XX Heinrich G, Korb R;  
XX WO2003013537-A2.  
XX  
XX 20-FEB-2003.  
XX  
XX 23-JUL-2002; 2002WO-EP008218.  
XX  
XX 23-JUL-2001; 2001EP-00117608.  
XX  
XX 24-MAY-2002; 2002EP-00011710.  
XX

PA (EPID-) EPIDAURUS BIOTECHNOLOGIE AG.  
XX  
XX Heinrich G, Korb R;  
XX WPI; 2003-268145/26.  
XX  
XX New use of irinotecan for preparation of pharmaceutical compositions for  
XX treating cancer in subject having genome with variant allele comprising  
XX multidrug resistance 1 polynucleotide.

PS Claim 1; Page 82; 130pp; English.  
XX  
XX The invention relates to the novel use of irinotecan or its derivative  
XX for the preparation of pharmaceutical compositions for treating  
XX colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or  
XX malignant glioma in a subject having a genome with a variant allele which  
XX comprises a multidrug resistance 1 (MDR1) polynucleotide. A composition  
XX of the invention has cytostatic activity. The invention is useful for the  
XX preparation of pharmaceutical compositions for treating colorectal,  
XX cervical, gastric, lung, ovarian or pancreatic cancer, or malignant  
XX glioma in a subject (preferably human, more preferably African or Asian)  
XX or a mouse. The present sequence is used in the exemplification of the  
XX invention.

XX Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGGTGCAGT 406  
|||||  
DB 1 TCCTCTGAGGATGTGCAGT 19  
RESULT 672  
ADB92575/C  
ID ADB92575 standard; DNA; 19 BP.  
XX  
AC ADB92575;  
XX  
DT 04-DEC-2003 (first entry)  
XX  
DE Human MDR1 variant allele sequence fragment SEQ ID NO:470.  
XX  
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;  
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;  
KW multidrug resistance 1; MDR1; cytostatic; ds; human; UGT1A1; MRP1; TOP1.

OS Homo sapiens.  
XX  
XX WO2003013535-A2.  
XX  
XX 20-FEB-2003.  
XX  
XX 23-JUL-2002; 2002WO-EP008220.  
XX  
XX 23-JUL-2001; 2001EP-00117608.  
XX  
XX 24-MAY-2002; 2002EP-00011710.  
XX  
XX (EPID-) EPIDAURUS BIOTECHNOLOGIE AG.  
XX  
XX Heinrich G, Korb R;  
XX WPI; 2003-342400/32.  
XX  
XX New use of irinotecan for preparation of pharmaceutical compositions for  
XX treating cancer in subject having genome with variant allele comprising  
XX multidrug resistance 1 polynucleotide.

PS Claim 8; Page 54; 104pp; English.  
XX  
XX The invention relates to a novel use of irinotecan or its derivative for  
XX the preparation of a pharmaceutical composition for treating colorectal,  
XX cervical, gastric, lung, ovarian or pancreatic cancer, or malignant  
XX glioma in a subject having a genome with a variant allele which comprises  
XX a multidrug resistance 1 (MDR1) polynucleotide. A composition of the  
XX invention has cytostatic activity. The present sequence is used in the  
XX exemplification of the invention.

XX Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGGTGCAGT 406  
|||||  
DB 19 TCCTCTGAGGATGTGCAGT 1

RESULT 673  
ADB92574  
ID ADB92574 standard; DNA; 19 BP.  
XX  
AC ADB92574;  
XX  
DT 04-DEC-2003 (first entry)  
XX  
DE Human MDR1 variant allele sequence fragment SEQ ID NO:469.  
XX  
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;



PD 04-SEP-2003.  
XX 28-JAN-2003; 2003WO-US002510.  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409233P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX (SIRN-) SIRNA THERAPEUTICS INC.  
XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;  
XX WPI; 2003-689980/65.  
XX New short interfering nucleic acid, useful e.g. for treatment and  
XX diagnosis of cancer, downregulates expression of mitogen-activated  
XX protein kinase genes.  
XX Example 3; SEQ ID NO 473; 164pp; English.  
XX The present invention describes a short interfering nucleic acid (siNA)  
XX that downregulates expression of a mitogen-activated protein kinase  
XX (MAPK) genes by RNA interference. Also described: (1) a method for  
XX modulating expression of MAPK genes in cells, tissue explants or  
XX organisms by introduction of siNA; (2) kits for in vitro or in vivo  
XX delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)  
XX vectors that express siNA and cells containing these vectors. MAPK siNAs  
XX have cytostatic, anorectic, antidiabetic, antiinflammatory,  
XX antiasthmatic, immunosuppressive, antibacterial, antirheumatic,  
XX antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK  
XX siNAs can be used to modulate the expression of MAPK genes, in cells,  
XX tissue explants or organisms, e.g. for treating obesity; diabetes types I  
XX and II; a wide range of tumors, and inflammatory diseases (asthma,  
XX septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel  
XX disease). They can also be used for drug screening; diagnosis; target  
XX identification and validation; genetic engineering; pharmacogenomics;  
XX studying gene function and gene mapping (e.g. of single-nucleotide  
XX polymorphisms). The present sequence represents a MAPK siNA which is used  
XX in the exemplification of the present invention.  
XX Sequence 19 BP; 6 A; 7 C; 4 G; 0 T; 2 U; 0 Other;  
XX  
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;  
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
XX  
QY 1156 ATGTGGGTGTGGGTGCA 1174  
DB 19 ATCTGCTGTGGGTGCA 1  
XX  
RESULT 676  
ADE29841/c  
ID ADE29841 standard; RNA; 19 BP.  
XX  
XX ADE29841;  
XX  
XX 29-JAN-2004 (first entry)  
XX Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:463.  
XX short interfering nucleic acid; siNA; downregulation; inhibition;  
XX mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;  
XX cytosstatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;  
XX immunosuppressive; antibacterial; antirheumatic; antiarthritic;  
XX antipsoriatic; gastrointestinal; obesity; diabetes; tumour;  
XX inflammatory disease; asthma; septic shock; rheumatoid arthritis;  
XX psoriasis; inflammatory bowel disease; drug screening;  
XX genetic engineering; pharmacogenomic; gene mapping; ss.

XX Synthetic.  
XX WO2003072590-A1.  
XX 04-SEP-2003.  
XX 28-JAN-2003; 2003WO-US002510.  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409233P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX (SIRN-) SIRNA THERAPEUTICS INC.  
XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;  
XX WPI; 2003-689980/65.  
XX New short interfering nucleic acid, useful e.g. for treatment and  
XX diagnosis of cancer, downregulates expression of mitogen-activated  
XX protein kinase genes.  
XX Example 3; SEQ ID NO 463; 164pp; English.  
XX The present invention describes a short interfering nucleic acid (siNA)  
XX that downregulates expression of a mitogen-activated protein kinase  
XX (MAPK) genes by RNA interference. Also described: (1) a method for  
XX modulating expression of MAPK genes in cells, tissue explants or  
XX organisms by introduction of siNA; (2) kits for in vitro or in vivo  
XX delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)  
XX vectors that express siNA and cells containing these vectors. MAPK siNAs  
XX have cytostatic, anorectic, antidiabetic, antiinflammatory,  
XX antiasthmatic, immunosuppressive, antibacterial, antirheumatic,  
XX antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK  
XX siNAs can be used to modulate the expression of MAPK genes, in cells,  
XX tissue explants or organisms, e.g. for treating obesity; diabetes types I  
XX and II; a wide range of tumors, and inflammatory diseases (asthma,  
XX septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel  
XX disease). They can also be used for drug screening; diagnosis; target  
XX identification and validation; genetic engineering; pharmacogenomics;  
XX studying gene function and gene mapping (e.g. of single-nucleotide  
XX polymorphisms). The present sequence represents a MAPK siNA which is used  
XX in the exemplification of the present invention.  
XX Sequence 19 BP; 3 A; 2 C; 9 G; 0 T; 5 U; 0 Other;  
XX  
XX Query Match 0.8%; Score 14.2; DB 1; Length 19;  
XX Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
XX  
QY 985 AAGCCCCAGAACCTGCTCA 1003  
DB 19 AAGCCCTCCAACTGCTCA 1  
XX  
RESULT 677  
ADE29736  
ID ADE29736 standard; RNA; 19 BP.  
XX  
XX ADE29736;  
XX  
XX 29-JAN-2004 (first entry)  
XX Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:358.  
XX short interfering nucleic acid; siNA; downregulation; inhibition;  
XX mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;  
XX cytosstatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;

KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;  
 KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;  
 KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;  
 KW psoriasis; inflammatory bowel disease; drug screening;  
 KW genetic engineering; pharmacogenomic; gene mapping; ss.  
 XX Synthetic.  
 XX WO2003072590-A1.  
 XX 04-SEP-2003.  
 XX 28-JAN-2003; 2003WO-US002510.  
 XX 20-FEB-2002; 2002US-0358580P.  
 XX 11-MAR-2002; 2002US-0363124P.  
 XX 06-JUN-2002; 2002US-0386782P.  
 XX 29-AUG-2002; 2002US-0406784P.  
 XX 05-SEP-2002; 2002US-0408378P.  
 XX 09-SEP-2002; 2002US-0409293P.  
 XX 15-JAN-2003; 2003US-0440129P.  
 XX (SIRN-) SIRNA THERAPEUTICS INC.  
 XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;  
 XX WPI; 2003-689980/65.  
 XX New short interfering nucleic acid, useful e.g. for treatment and  
 XX diagnosis of cancer, downregulates expression of mitogen-activated  
 XX protein kinase genes.  
 XX Example 3; SEQ ID NO 358; 164pp; English.  
 XX The present invention describes a short interfering nucleic acid (siNA)  
 XX that downregulates expression of a mitogen-activated protein kinase  
 XX (MAPK) genes by RNA interference. Also described: (1) a method for  
 XX modulating expression of MAPK genes in cells, tissue explants or  
 XX organisms by introduction of siNA; (2) kits for in vitro or in vivo  
 XX delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)  
 XX vectors that express siNA and cells containing these vectors. MAPK siNAs  
 XX can be used to modulate the expression of MAPK genes, in cells,  
 XX tissue explants or organisms, e.g. for treating obesity; diabetes types I  
 XX and II; a wide range of tumours, and inflammatory diseases (asthma,  
 XX septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel  
 XX disease). They can also be used for drug screening; diagnosis; target  
 XX identification and validation; genetic engineering; pharmacogenomics;  
 XX studying gene function and gene mapping (e.g. of single-nucleotide  
 XX polymorphisms). The present sequence represents a MAPK siNA which is used  
 XX in the exemplification of the present invention.  
 XX Sequence 19 BP; 5 A; 9 C; 2 G; 0 T; 3 U; 0 Other;  
 XX Query Match 0.8%; Score 14.2; DB 1; Length 19;  
 XX Best Local Similarity 73.7%; Pred. No. 6.9e+02;  
 XX Matches 14; Conservative 2; Mismatches 3; Indels 0; Gaps 0;  
 Qy 985 AGCCCGAAGAACTGCTCA 1003  
 Db 1 AAGCCCGAAGAACTGCTCA 19  
 ||||| ||||| ||||| |||||  
 RESULT 678  
 ADE29735  
 ID ADE29735 standard; RNA; 19 BP.  
 XX AC  
 XX ADE29735;  
 XX 29-JAN-2004 (first entry)  
 XX DT  
 XX ID

DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:357.  
 XX short interfering nucleic acid; siNA; downregulation; inhibition;  
 XX mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;  
 KW cytostatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;  
 KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;  
 KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;  
 KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;  
 KW psoriasis; inflammatory bowel disease; drug screening;  
 KW genetic engineering; pharmacogenomic; gene mapping; ss.  
 XX Synthetic.  
 XX WO2003072590-A1.  
 XX 04-SEP-2003.  
 XX 28-JAN-2003; 2003WO-US002510.  
 XX 20-FEB-2002; 2002US-0358580P.  
 XX 11-MAR-2002; 2002US-0363124P.  
 XX 06-JUN-2002; 2002US-0386782P.  
 XX 29-AUG-2002; 2002US-0406784P.  
 XX 05-SEP-2002; 2002US-0408378P.  
 XX 09-SEP-2002; 2002US-0409293P.  
 XX 15-JAN-2003; 2003US-0440129P.  
 XX (SIRN-) SIRNA THERAPEUTICS INC.  
 XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;  
 XX WPI; 2003-689980/65.  
 XX New short interfering nucleic acid, useful e.g. for treatment and  
 XX diagnosis of cancer, downregulates expression of mitogen-activated  
 XX protein kinase genes.  
 XX Example 3; SEQ ID NO 357; 164pp; English.  
 XX The present invention describes a short interfering nucleic acid (siNA)  
 XX that downregulates expression of a mitogen-activated protein kinase  
 XX (MAPK) genes by RNA interference. Also described: (1) a method for  
 XX modulating expression of MAPK genes in cells, tissue explants or  
 XX organisms by introduction of siNA; (2) kits for in vitro or in vivo  
 XX delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)  
 XX vectors that express siNA and cells containing these vectors. MAPK siNAs  
 XX can be used to modulate the expression of MAPK genes, in cells,  
 XX tissue explants or organisms, e.g. for treating obesity; diabetes types I  
 XX and II; a wide range of tumours, and inflammatory diseases (asthma,  
 XX septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel  
 XX disease). They can also be used for drug screening; diagnosis; target  
 XX identification and validation; genetic engineering; pharmacogenomics;  
 XX studying gene function and gene mapping (e.g. of single-nucleotide  
 XX polymorphisms). The present sequence represents a MAPK siNA which is used  
 XX in the exemplification of the present invention.  
 XX Sequence 19 BP; 5 A; 6 C; 4 G; 0 T; 4 U; 0 Other;  
 XX Query Match 0.8%; Score 14.2; DB 1; Length 19;  
 XX Best Local Similarity 68.4%; Pred. No. 6.9e+02;  
 XX Matches 13; Conservative 3; Mismatches 3; Indels 0; Gaps 0;  
 Qy 967 GTGCTACACCGAGACCTCA 985  
 Db 1 GUGCUCACCGAGAUCAA 19  
 ||||| ||||| ||||| |||||  
 RESULT 679  
 ADE29840/c  
 ID ADE29840 standard; RNA; 19 BP.

XX ADE29840;  
XX 29-JAN-2004 (first entry)  
XX Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:462.  
XX short interfering nucleic acid; siNA; downregulation; inhibition;  
KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;  
KW cytostatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;  
KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;  
KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;  
KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;  
KW psoriasis; inflammatory bowel disease; drug screening;  
KW genetic engineering; pharmacogenomic; gene mapping; ss.  
XX Synthetic.  
XX WO2003072590-A1.  
XX 04-SEP-2003.  
XX 28-JAN-2003; 2003WO-US002510.  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX (SIRN-) SIRNA THERAPEUTICS INC.  
XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;  
XX WPI; 2003-689980/65.  
XX New short interfering nucleic acid, useful e.g. for treatment and  
PT diagnosis of cancer, downregulates expression of mitogen-activated  
PT protein kinase genes.  
XX Example 3; SEQ ID NO 462; 164pp; English.  
XX The present invention describes a short interfering nucleic acid (siNA)  
CC that downregulates expression of a mitogen-activated protein kinase  
CC (MAPK) genes by RNA interference. Also described: (1) a method for  
CC modulating expression of MAPK genes in cells, tissue explants or  
CC organisms by introduction of siNA; (2) kits for in vitro or in vivo  
CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)  
CC vectors that express siNA and cells containing these vectors. MAPK siNAs  
CC have cytostatic, anorectic, antidiabetic, antiinflammatory,  
CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,  
CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK  
CC siNAs can be used to modulate the expression of MAPK genes, in cells,  
CC tissue explants or organisms, e.g. for treating obesity; diabetes types I  
CC and II; a wide range of tumours, and inflammatory diseases (asthma,  
CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel  
CC disease). They can also be used for drug screening; diagnosis; target  
CC identification and validation; genetic engineering; pharmacogenomics;  
CC studying gene function and gene mapping (e.g. of single-nucleotide  
CC polymorphisms). The present sequence represents a MAPK siNA which is used  
CC in the exemplification of the present invention.  
XX Sequence 19 BP; 4 A; 4 C; 6 G; 0 T; 5 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 6.9e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 967 GTGCTACCCGAGACTCA 985  
Db 19 GTGCTACCCGAGACTCA 1

RESULT 680  
AAQ24922  
ID AAQ24922 standard; DNA; 20 BP.  
XX AAQ24922;  
AC AAQ24922;  
XX 25-MAR-2003 (revised)  
DT 19-NOV-1992 (first entry)  
DE Chicken alpha-globin primer (242).  
KW Single primer amplification; SPAR; ss.  
XX Synthetic.  
XX WO9207948-A1.  
XX 14-MAY-1992.  
XX 05-NOV-1991; 91WO-US008233.  
XX 06-NOV-1990; 90US-00610973.  
XX 29-JUL-1991; 91US-00737919.  
XX (LUBR ) LUBRIZOL CORP.  
XX Cardineau GA, Filher P;  
XX WPI; 1992-183683/22.  
XX Nucleic acid sequence single primer amplification - useful for genomic  
PT variation analysis and polymorphism detection for restriction fragment  
PT length data.  
XX Claim 16; Page 39; 65pp; English.  
XX The sequence originates from the chicken alpha-globin gene. It is the  
CC complement of primer (227) (AAQ24908). The selected primer is used in  
CC practice of the single primer amplification reaction (SPAR). (Updated on  
CC 25-MAR-2003 to correct PN field.)  
XX Sequence 20 BP; 6 A; 10 C; 1 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1062 CCCAACCAAGACATCTCC 1080  
Db 1 CCCAACCAAGACCTACTTC 19  
RESULT 681  
AAT11973/c  
ID AAT11973 standard; DNA; 20 BP.  
XX AAT11973;  
AC AAT11973;  
XX 25-MAR-2003 (revised)  
DT 13-MAR-1996 (first entry)  
XX CMV antisense oligonucleotide (ISIS 5476).  
XX antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;  
KW intermediate early complex; IE1; IE2; DNA polymerase gene; ss.  
XX Synthetic.  
XX Key Location/Qualifiers  
FT modified\_base 1..20 /\*tag= a





CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or  
 CC hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a  
 CC papillomavirus. The PNAs can be used to target RNA and single stranded  
 CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence  
 CC PNAs may be used therapeutically for modulating cytomegalovirus and  
 CC papillomavirus processes and also as diagnostics (e.g., as probes for  
 CC specific mRNAs). PNA oligomers have high affinity for complementary  
 CC single stranded DNA. They are also able to form triple helices in which a  
 CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds  
 CC with the resulting double helix or with the first PNA strand. The PNAs  
 CC possess no significant charge and are water soluble, which facilitates  
 CC cellular uptake. Further, since they contain amides of non-biological  
 CC amino acids, they are biostable and resistant to enzymatic degradation by  
 CC proteases. The present sequence targets CMV IE2 nuclear localisation  
 CC signal 2

XX  
 SQ Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 131 GCATGAGAGAGATCAACG 149  
 Db 20 GCAGAGAGAGAGCAACG 2

RESULT 684  
 AAQ94391  
 ID AAQ94391 standard; DNA; 20 BP.

XX AC AAQ94391;  
 XX  
 DT 04-JUN-1996 (first entry)

XX DE 5.8S ribosomal RNA gene ITS primer ITS2.

XX KW Plant pathogen; fungus; Septoria nodorum; Septoria tritici; Fusarium;  
 KW Pseudocercospora herpotrichoides; Mycosphaerella fijiensis; PCR;  
 KW Mycosphaerella musicola; amplification; primer; ribosomal RNA gene;  
 KW internal transcribed region; strain; capture; colourimetric assay;  
 KW isolate; development; population; ss.

XX OS Synthetic.

XX PN WO9529260-A2.

XX PD 02-NOV-1995.

XX PF 19-APR-1995; 95WO-US004712.

XX PR 25-APR-1994; 94US-00233608.

XX PA (CIBA ) CIBA GEIGY AG.

XX PI Ligon JM, Beck JJ;

XX DR WPI; 1995-383005/49.

XX DNA encoding intervening transcribed sequence - used for detection of  
 PT plant fungal pathogens.

XX PS Claim 5; Page 15; 65pp; English.

XX CC A novel method for the detection of plant pathogenic strains of fungi  
 CC e.g. Septoria nodorum, S. tritici, Pseudocercospora herpotrichoides,  
 CC Mycosphaerella fijiensis, M. musicola or Fusarium spp, involves the PCR  
 CC amplification of sequences found in the internal transcribed region (ITS)  
 CC of the 18S, 5.8S and 28S ribosomal RNA genes by the primers AAQ94359-93  
 CC and AAQ05357-72. These primers are derived from the ITS sequences of  
 CC these fungi (AAQ05394-T05404 and AAQ94398) and are strain specific. The  
 CC amplification products of the reactions using these primers can be used  
 CC with the capture primers AAT05378-93 in colourimetric assays. The primers

CC and ITS DNAs can be used for the detection of specific fungal pathogen  
 CC isolates and in monitoring disease development in plant populations

XX SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTGCGTCTTCGTCGATGC 1567

Db 2 CTGCGTCTTCATCGATGC 20

RESULT 685  
 AAQ94392/C  
 ID AAQ94392 standard; DNA; 20 BP.

XX AC AAQ94392;

XX DT 04-JUN-1996 (first entry)

XX DE 5.8S ribosomal RNA gene ITS primer ITS3.

XX KW Plant pathogen; fungus; Septoria nodorum; Septoria tritici; Fusarium;  
 KW Pseudocercospora herpotrichoides; Mycosphaerella fijiensis; PCR;  
 KW Mycosphaerella musicola; amplification; primer; ribosomal RNA gene;  
 KW internal transcribed region; strain; capture; colourimetric assay;  
 KW isolate; development; population; ss.

XX OS Synthetic.

XX PN WO9529260-A2.

XX PD 02-NOV-1995.

XX PF 19-APR-1995; 95WO-US004712.

XX PR 25-APR-1994; 94US-00233608.

XX PA (CIBA ) CIBA GEIGY AG.

XX PI Ligon JM, Beck JJ;

XX DR WPI; 1995-383005/49.

XX DNA encoding intervening transcribed sequence - used for detection of  
 PT plant fungal pathogens.

XX PS Claim 5; Page 15; 65pp; English.

XX CC A novel method for the detection of plant pathogenic strains of fungi  
 CC e.g. Septoria nodorum, S. tritici, Pseudocercospora herpotrichoides,  
 CC Mycosphaerella fijiensis, M. musicola or Fusarium spp, involves the PCR  
 CC amplification of sequences found in the internal transcribed region (ITS)  
 CC of the 18S, 5.8S and 28S ribosomal RNA genes by the primers AAQ94359-93  
 CC and AAQ05357-72. These primers are derived from the ITS sequences of  
 CC these fungi (AAQ05394-T05404 and AAQ94398) and are strain specific. The  
 CC amplification products of the reactions using these primers can be used  
 CC with the capture primers AAT05378-93 in colourimetric assays. The primers  
 CC and ITS DNAs can be used for the detection of specific fungal pathogen  
 CC isolates and in monitoring disease development in plant populations

XX SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTGCGTCTTCGTCGATGC 1567

Db 19 CTGCGTCTTCATCGATGC 1



Db 1 CTTGATGTCACGCTGC 19  
||||| ||| |||||  
RESULT 689  
AAT47929  
ID AAT47929 standard; DNA; 20 BP.  
XX AC AAT47929;  
XX DT 18-JUN-1997 (first entry)  
XX DE Primer for N-terminal L-proline-4-hydroxylase coding sequence.  
XX KW L-proline-4-hydroxylase; convert; catalyse; L-proline; production;  
XX KW trans-4-hydroxy-L-proline; 2-ketoglutaric acid; ferrous ion;  
XX KW industrial scale; intermediate; manufacture; drug; food additive; primer;  
XX KW PCR; polymerase chain reaction; ss.  
XX OS Synthetic.  
XX PN W09627669-Al.  
XX PD 12-SEP-1996.  
XX PF 07-MAR-1996; 96WO-JP0000559.  
XX PR 07-MAR-1995; 95JP-00046988.  
XX PA (KYOW) KYOWA HAKKO KOGYO KK.  
XX PI Ozaki A, Mori H, Shibasaki T;  
XX DR WPI; 1996-425429/42.  
XX PT DNA coding for L-proline-4-hydroxylase of microbial origin - for large  
XX PT scale production of trans-4-hydroxy-L-proline, useful as an intermediate  
XX PT in drug synthesis or as a food additive.  
XX PS Example 1; Page 51; 83pp; Japanese.  
XX CC AAT47929-30 are primers used to amplify the sequence encoding the N-  
XX CC terminal of L-proline-4-hydroxylase (W09291) from Dactylosporangium sp.  
XX CC The enzyme converts L-proline to trans-4-hydroxy-L-proline in the  
XX CC presence of 2-ketoglutaric acid and ferrous ions. The DNA (AAT47924) is  
XX CC used for the efficient production of trans-4-hydroxy-L-proline on an  
XX CC industrial scale for use as an intermediate in the manufacture of drugs  
XX CC and as a food additive  
XX SQ Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 856 AAGGAGCTGAAGCAGTACC 874  
Db 1 ACGGAGCTCAGCAGTACC 19  
RESULT 690  
AAAX24129/c  
ID AAAX24129 standard; DNA; 20 BP.  
XX AC AAAX24129;  
XX XX  
XX DT 27-AUG-2003 (revised)  
XX DT 01-JUL-1999 (first entry)  
XX DE HSV-directed phosphonomonoester oligonucleotide analogue 5.  
XX KW Phosphonomonoester analogue; inhibitor; antisense; cancer; restenosis;  
XX KW ribozyme; diagnostic agent; detection; treatment; disease; virus;

KW integrin; cell-cell adhesion receptor; TNF-alpha; ss.  
XX OS Synthetic.  
XX OS Human herpesvirus 1.  
XX PN DE19508923-Al.  
XX PD 19-SEP-1996.  
XX PF 13-MAR-1995; 95DE-01008923.  
XX PR 13-MAR-1995; 95DE-01008923.  
XX PA (FARH) HOECHST AG.  
XX AN Anuschirwan P, Uhlmann E, Breipohl G, Wallmeier H;  
XX DR WPI; 1996-425893/43.  
XX PT New oligonucleotide analogues contg. phosphomonoester bridges - for  
XX PT therapeutic inhibition of gene expression, e.g. in cancer or viral  
XX PT infection, with good specificity and in vivo stability.  
XX PS Disclosure; Page 18; 36pp; German.  
XX CC This invention describes novel phosphonomonoester oligonucleotide  
XX CC analogues which act as inhibitors of gene expression (as sense/antisense,  
XX CC ribozyme or triplex-forming molecules), useful as diagnostic agents (i.e.  
XX CC probes for detecting nucleic acid) or for treatment of diseases caused by  
XX CC viruses, influenced by integrins or cell-cell adhesion receptors, induced  
XX CC by factors such as TNF-alpha, or cancer or restenosis. The products of  
XX CC the invention satisfy the requirements of good in-vivo stability; ability  
XX CC to cross cellular and nuclear membranes, and specific binding to target  
XX CC nucleic acid better than known oligonucleotides. (Updated on 27-AUG-2003  
XX CC to correct OS field.)  
XX SQ Sequence 20 BP; 2 A; 2 C; 14 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 553 CCCCTCAGCGCGCGCTCC 571  
Db 19 CCCCTCAGCGCGCTCC 1  
RESULT 691  
AAT66009/c  
ID AAT66009 standard; DNA; 20 BP.  
XX AC AAT66009;  
XX XX  
XX DT 25-MAR-2003 (revised)  
XX DT 19-JUN-1997 (first entry)  
XX DE Primer #2 to amplify repeat sequence marker Mfd106.  
XX KW Polymorphism; repeat sequence; genetic marker; primer; amplification;  
XX KW PCR; polymerase chain reaction; paternity; maternity; human; pedigree;  
XX KW linkage analysis; genetic disease; animal; plant; breeding; locus;  
XX KW hybridisation; chromosome; ds.  
XX OS Synthetic.  
XX PN US5582979-A.  
XX PD 10-DEC-1996.  
XX PF 04-APR-1994; 94US-00222177.  
XX PR 21-APR-1989; 89US-00341562.  
XX PR 05-SEP-1991; 91US-00754351.

XX PA (MARS-) MARSHFIELD CLINIC.  
XX PI Weber JL;  
XX DR WPI; 1997-042299/04.  
XX PT Detection of polymorphic genetic markers of the form (dC-dA)n(dG-dT)n -  
XX PT using novel nucleic acid mols. as primers.  
XX PS Claim 7; Col 13-14; 186pp; English.  
XX CC The invention relates to the isolation of polymorphic repeat sequences  
CC having the sequence (dC-dA)n.(dG-dT)n which can be used as genetic  
CC markers. Primers based on these sequences can be used to detect these  
CC repeats, especially for use in e.g. paternity or maternity testing, human  
CC genetic analysis such as linkage analysis of genetic disease, commercial  
CC animal or plant breeding or pedigree analysis. Clones containing the  
CC repeat sequences were isolated by hybridisation of chromosome-specific  
CC phage libraries with a synthetic poly(dC-dA).(dG-dT) probe. Over 100  
CC repeat blocks were isolated. The primers AAT65798-T66047 were used to PCR  
CC amplify the inserts from the isolated clones containing the repeat  
CC sequences. The primers AAT66008-9 were used to amplify the repeat  
CC sequence marker clone Mfd106 (AAT65777). (Updated on 25-MAR-2003 to  
CC correct PF field.)  
XX SQ Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 708 GATCAGACTGGACATGAA 726  
DB 20 GCTCTGACTGCACATGAA 2  
RESULT 692  
AAT84760/C  
ID AAT84760 standard; DNA; 20 BP.  
XX AC AAT84760;  
XX DT 25-MAR-2003 (revised)  
XX DT 04-NOV-1997 (first entry)  
XX DE Primer ITS2 for Candida internal transcribed spacer 2.  
XX KW Primer; internal transcribed spacer 2; ITS2; diagnosis; PCR;  
XX KW amplification; polymerase chain reaction; systemic candidiasis; ss.  
XX OS Synthetic.  
XX PN US5645992-A.  
XX PD 08-JUL-1997.  
XX PF 26-APR-1995; 95US-00429522.  
XX PR 20-MAY-1993; 93US-00065845.  
XX PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
XX PI Lasker B, Reiss E, Zakroff S, Lott TJ, Morrison CJ;  
XX DR WPI; 1997-362923/33.  
XX CC Candida tropicalis internal transcribed spacer 2 - and probes that  
XX CC hybridise to it, useful for highly sensitive diagnosis of systemic  
XX CC candidiasis.  
XX PS Example 1; Col 13-14; 10pp; English.  
XX CC The present sequence is a primer for the PCR amplification of the Candida  
XX CC internal transcribed spacer 4 (ITS4), which can be used in the diagnosis  
XX CC systemic candidiasis. (Updated on 25-MAR-2003 to correct PF field.)  
XX SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1549 CTTGGGTCTTCGTCGATGC 1567  
DB 2 CTTGGGTCTTCGTCGATGC 20  
RESULT 694  
AAT75521/C  
ID AAT75521 standard; DNA; 20 BP.  
XX AC AAT75521;  
XX XX AAT75521;  
XX DT 25-MAR-2003 (revised)

CC The present sequence is a primer for the PCR amplification of the Candida  
CC internal transcribed spacer 2 (ITS2), which can be used in the diagnosis  
CC systemic candidiasis. (Updated on 25-MAR-2003 to correct PF field.)  
XX SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1549 CTTGGGTCTTCGTCGATGC 1567  
DB 19 CTTGGGTCTTCGTCGATGC 1  
RESULT 693  
AAT84762  
ID AAT84762 standard; DNA; 20 BP.  
XX AC AAT84762;  
XX DT 25-MAR-2003 (revised)  
XX DT 04-NOV-1997 (first entry)  
XX DE Primer ITS4 for Candida internal transcribed spacer 4.  
XX KW Primer; internal transcribed spacer 4; ITS4; diagnosis; PCR;  
XX KW amplification; polymerase chain reaction; systemic candidiasis; ss.  
XX OS Synthetic.  
XX PN US5645992-A.  
XX PD 08-JUL-1997.  
XX PF 26-APR-1995; 95US-00429522.  
XX PR 20-MAY-1993; 93US-00065845.  
XX PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
XX PI Lasker B, Reiss E, Zakroff S, Lott TJ, Morrison CJ;  
XX DR WPI; 1997-362923/33.  
XX CC Candida tropicalis internal transcribed spacer 2 - and probes that  
XX CC hybridise to it, useful for highly sensitive diagnosis of systemic  
XX CC candidiasis.  
XX PS Example 1; Col 13-14; 10pp; English.  
XX CC The present sequence is a primer for the PCR amplification of the Candida  
XX CC internal transcribed spacer 4 (ITS4), which can be used in the diagnosis  
XX CC systemic candidiasis. (Updated on 25-MAR-2003 to correct PF field.)  
XX SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1549 CTTGGGTCTTCGTCGATGC 1567  
DB 2 CTTGGGTCTTCGTCGATGC 20  
RESULT 694  
AAT75521/C  
ID AAT75521 standard; DNA; 20 BP.  
XX AC AAT75521;  
XX XX AAT75521;  
XX DT 25-MAR-2003 (revised)

DT 24-SEP-1997 (first entry)  
 XX  
 DE Candida universal internal transcribed spacer primer, ITS2.  
 XX  
 KW Internal transcribed spacer; ITS; detection; probe; diagnosis;  
 KW systemic infection; candidiasis; primer; PCR; amplification;  
 KW polymerase chain reaction; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN US5635353-A.  
 XX  
 XX 03-JUN-1997.  
 PD  
 XX 26-APR-1995; 95US-00429532.  
 PF  
 XX 20-MAY-1993; 93US-00065845.  
 PR  
 XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
 PA  
 PI Lasker B, Reiss E, Zakroff S, Lott TJ, Morrison CJ;  
 XX WPI; 1997-309822/28.  
 DR  
 XX Isolated nucleic acid specific for internal transcribed spacer of Candida  
 PT krusei - can be detected by specific probe for rapid and sensitive  
 PT diagnosis of systemic candidiasis.  
 XX  
 XX Example 2; Col 13-14; 10pp; English.  
 PS  
 CC The present sequence is an universal Candida internal transcribed spacer  
 CC (ITS) primer for the detection of ITS, useful to diagnose systemic  
 CC Candida infection, i.e. candidiasis. (Updated on 25-MAR-2003 to correct  
 CC PF field.)  
 CC  
 XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1549 CTTCGGTCTTCATCGATGC 1567  
 DB 2 CTGCGTCTTCATCGATGC 20  
 RESULT 695  
 AAT75523  
 ID AAT75523 standard; DNA; 20 BP.  
 AC  
 AC AAT75523;  
 XX  
 XX 11-AUG-1997 (first entry)  
 DT  
 XX Loci-specific primer for assessing integrity of human Y chromosome.  
 DE  
 XX Y chromosome; integrity; chromosome locus; primer; amplification; PCR;  
 KW polymerase chain reaction; fertility; azoospermia; oligospermia;  
 KW infertility; diagnosis; DYS209; DYS210; DYS211; DYS212; DYS213; DYS214; DYS215; DYS216; DYS217; DYS218; DYS219; DYS220; DYS221; DYS222; DYS223; DYS224; DYS225; DYS226; DYS227; DYS228; DYS229; DYS230; DYS231; DYS232; DYS233; DYS234; DYS235; DYS236; DYS237; DYS238; DYS239; DYS240; DYS241; DYS242; DYS243; DYS244; DYS245; DYS246; DYS247; DYS248; DYS249; DYS250; DYS251; DYS252; DYS253; DYS254; DYS255; DYS256; DYS257; DYS258; DYS259; DYS260; DYS261; DYS262; DYS263; DYS264; DYS265; DYS266; DYS267; DYS268; DYS269; DYS270; DYS271; DYS272; DYS273; DYS274; DYS275; DYS276; DYS277; DYS278; DYS279; DYS280; DYS281; DYS282; DYS283; DYS284; DYS285; DYS286; DYS287; DYS288; DYS289; DYS290; DYS291; DYS292; DYS293; DYS294; DYS295; DYS296; DYS297; DYS298; DYS299; DYS300; DYS301; DYS302; DYS303; DYS304; DYS305; DYS306; DYS307; DYS308; DYS309; DYS310; DYS311; DYS312; DYS313; DYS314; DYS315; DYS316; DYS317; DYS318; DYS319; DYS320; DYS321; DYS322; DYS323; DYS324; DYS325; DYS326; DYS327; DYS328; DYS329; DYS330; 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DYS1408; DYS1409; DYS1410; DYS1411; DYS1412; DYS1413; DYS1414; DYS1415; DYS1416; DYS1417; DYS1418; DYS1419; DYS1420; DYS1421; DYS1422; DYS1423; DYS1424; DYS1425; DYS1426; DYS1427; DYS1428; DYS1429; DYS1430; DYS1431; DYS1432; DYS1433; DYS1434; DYS1435; DYS1436; DYS1437; DYS1438; DYS1439; DYS1440; DYS1441; DYS1442; DYS1443; DYS1444; DYS1445; DYS1446; DYS1447; DYS1448; DYS1449; DYS1450; DYS1451; DYS1452; DYS1453; DYS1454; DYS1455; DYS1456; DYS1457; DYS1458; DYS1459; DYS1460; DYS1461; DYS1462; DYS1463; DYS1464; DYS1465; DYS1466; DYS1467; DYS1468; DYS1469; DYS1470; DYS1471; DYS1472; DYS1473; DYS1474; DYS1475; DYS1476; DYS1477; DYS1478; DYS1479; DYS1480; DYS1481; DYS1482; DYS1483; DYS1484; DYS1485; DYS1486; DYS1487; DYS1488; DYS1489; DYS1490; DYS1491; DYS1492; DYS1493; DYS1494; DYS1495; DYS1496; DYS1497; DYS1498; DYS1499; DYS1500; DYS1501; DYS1502; DYS1503; DYS1504; DYS1505; DYS1506; DYS1507; DYS1508; DYS1509; DYS1510; DYS1511; DYS1512; DYS1513; DYS1514; DYS1515; DYS1516; DYS1517; DYS1518; DYS1519; DYS1520; DYS1521; DYS1522; DYS1523; DYS1524; DYS1525; DYS1526; DYS1527; DYS1528; DYS1529; DYS1530; DYS1531; DYS1532; DYS1533; DYS1534; DYS1535; DYS1536; DYS1537; DYS1538; DYS1539; DYS1540; DYS1541; DYS1542; DYS1543; DYS1544; DYS1545; DYS1546; DYS1547; DYS1548; DYS1549; DYS1550; DYS1551; DYS1552; DYS1553; DYS1554; DYS1555; DYS1556; DYS1557; DYS1558; DYS1559; DYS1560; DYS1561; DYS1562; DYS1563; DYS1564; DYS1565; DYS1566; DYS1567; DYS1568; DYS1569; DYS1570; DYS1571; DYS1572; DYS1573; DYS1574; DYS1575; DYS1576; DYS1577; DYS1578; DYS1579; DYS1580; DYS1581; DYS1582; DYS1583; DYS1584; DYS1585; DYS1586; DYS1587; DYS1588; DYS1589; DYS1590; DYS1591; DYS1592; DYS1593; DYS1594; DYS1595; DYS1596; DYS1597; DYS1598; DYS1599; DYS1600; DYS1601; DYS1602; DYS1603; DYS1604; DYS1605; DYS1606; DYS1607; DYS1608; DYS1609; DYS1610; DYS1611; DYS1612; DYS1613; DYS1614; DYS1615; DYS1616; DYS1617; DYS1618; DYS1619; DYS1620; DYS1621; DYS1622; DYS1623; DYS1624; DYS1625; DYS1626; DYS1627; DYS1628; DYS1629; DYS1630; DYS1631; DYS1632; DYS1633; DYS1634; DYS1635; DYS1636; DYS1637; DYS1638; DYS1639; DYS1640; DYS1641; DYS1642; DYS1643; DYS1644; DYS1645; DYS1646; DYS1647; DYS1648; DYS1649; DYS1650; DYS1651; DYS1652; DYS1653; DYS1654; DYS1655; DYS1656; DYS1657; DYS1658; DYS1659; DYS1660; DYS1661; DYS1662; DYS1663; DYS1664; DYS1665; DYS1666; DYS1667; DYS1668; DYS1669; DYS1670; DYS1671; DYS1672; DYS1673; DYS1674; DYS1675; DYS1676; DYS1677; DYS1678; DYS1679; DYS1680; DYS1681; DYS1682; DYS1683; DYS1684; DYS1685; DYS1686; DYS1687; DYS1688; DYS1689; DYS1690; DYS1691; DYS1692; DYS1693; DYS1694; DYS1695; DYS1696; DYS1697; DYS1698; DYS1699; DYS1700; DYS1701; DYS1702; DYS1703; DYS1704; DYS1705; DYS1706; DYS1707; DYS1708; DYS1709; DYS1710; DYS1711; DYS1712; DYS1713; DYS1714; DYS1715; DYS1716; DYS1717; DYS1718; DYS1719; DYS1720; DYS1721; DYS1722; DYS1723; DYS1724; DYS1725; DYS1726; DYS1727; DYS1728; DYS1729; DYS1730; DYS1731; DYS1732; DYS1733; DYS1734; DYS1735; DYS1736; DYS1737; DYS1738; DYS1739; DYS1740; DYS1741; DYS1742; DYS1743; DYS1744; DYS1745; DYS1746; DYS1747; DYS1748; DYS1749; DYS1750; DYS1751; DYS1752; DYS1753; DYS1754; DYS1755; DYS1756; DYS1757; DYS1758; DYS1759; DYS1760; DYS1761; DYS1762; DYS1763; DYS1764; DYS1765; DYS1766; DYS1767; DYS1768; DYS1769; DYS1770; DYS1771; DYS1772; DYS1773; DYS1774; DYS1775; DYS1776; DYS1777; DYS1778; DYS1779; DYS1780; DYS1781; DYS1782; DYS1783; DYS1784; DYS1785; DYS1786; DYS1787; DYS1788; DYS1789; DYS1790; DYS1791; DYS1792; DYS1793; DYS1794; DYS1795; DYS1796; DYS1797; DYS1798; DYS1799; DYS1800; DYS1801; DYS1802; DYS1803; DYS1804; DYS1805; DYS1806; DYS1807; DYS1808; DYS1809; DYS1810; DYS1811; DYS1812; DYS1813; DYS1814; DYS1815; DYS1816; DYS1817; DYS1818; DYS1819; DYS1820; DYS1821; DYS1822; DYS1823; DYS1824; DYS1825; DYS1826; DYS1827; DYS1828; DYS1829; DYS1830; DYS1831; DYS1832; DYS1833; DYS1834; DYS1835; DYS1836; DYS1837; DYS1838; DYS1839; DYS1840; DYS1841; DYS1842; DYS1843; DYS1844; DYS1845; DYS1846; DYS1847; DYS1848; DYS1849; DYS1850; DYS1851; DYS1852; DYS1853; DYS1854; DYS1855; DYS1856; DYS1857; DYS1858; DYS1859; DYS1860; DYS1861; DYS1862; DYS1863; DYS1864; DYS1865; DYS1866; DYS1867; DYS1868; DYS1869; DYS1870; DYS1871; DYS1872; DYS1873; DYS1874; DYS1875; DYS1876; DYS1877; DYS1878; DYS1879; DYS1880; DYS1881; DYS1882; DYS1883; DYS1884; DYS1885; DYS1886; DYS1887; DYS1888; DYS1889; DYS1890; DYS1891; DYS1892; DYS1893; DYS1894; DYS1895; DYS1896; DYS1897; DYS1898; DYS1899; DYS1900; DYS1901; DYS1902; DYS1903; DYS1904; DYS1905; DYS1906; DYS1907; DYS1908; DYS1909; DYS1910; DYS1911; DYS1912; DYS1913; DYS1914; DYS1915; DYS1916; DYS1917; DYS1918; DYS1919; DYS1920; DYS1921; DYS1922; DYS1923; DYS1924; DYS1925; DYS1926; DYS1927; DYS1928; DYS1929; DYS1930; DYS1931; DYS1932; DYS1933; DYS1934; DYS1935; DYS1936; DYS1937; DYS1938; DYS1939; DYS1940; DYS1941; DYS1942; DYS1943; DYS1944; DYS1945; DYS1946; DYS1947; DYS1948; DYS1949; DYS1950; DYS1951; DYS1952; DYS1953; DYS1954; DYS1955;

CC that are associated with male fertility. It can be used to assess the integrity of the Y chromosome in males exhibiting azoospermia or oligospermia (no or very little spermatozoa in the semen) or to assess the genotype of infants of phenotypically ambiguous sexuality. The method can also be used in diagnosis and quality control

XX Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1493 CACAACTCTCTGACACTA 1501  
DB 19 CAATAACTCTCTGAGACCA 1

RESULT 697  
AAV62540/C  
ID AAV62540 standard; DNA; 20 BP.  
XX AC AAV62540;  
XX 17-DEC-1998 (first entry)  
XX Ribosomal gene 5.85 rDNA specific primer ITS3.  
XX Internal transcribed spacer; ITS; ribosomal RNA; Fusarium avenaceum;  
KW Fusarium culmorum; Fusarium graminearum; Fusarium moniliforme; plant;  
KW Septoria avenae; Microdochium nivale; Fusarium poae; fungal pathogen;  
KW PCR; nucleic acid detection; PCR primer; ss.

XX Synthetic.  
OS Fusarium sp.  
OS US5814453-A.  
XX 29-SEP-1998.

XX 02-JUL-1997; 97US-00887480.  
XX 19-APR-1995; 95WO-US004712.  
XX 15-OCT-1996; 96US-00722187.  
XX (NOVS ) NOVARTIS FINANCE CORP.

XX Beck JJ;  
XX WPI; 1998-541745/46.  
XX DNA isolated from fungal RNA, and its internal transcribed spacer  
PT sequence - used for detecting fungal pathogens in plant tissue.

XX Example 6; Col 17; 56pp; English.

XX Sequences AAV62507 to AAV62566 represent species specific PCR primers for various fungal isolates used for fungal detection in the course of the invention. The primers are designed based on the internal transcribed spacer (ITS) sequences of the various fungal species. The invention provides a DNA molecule isolated from the ribosomal RNA gene region of a fungal pathogen, where the DNA molecule consists of an ITS sequence selected from ITS1 and ITS2 of Fusarium culmorum, Fusarium graminearum, Fusarium moniliforme, Septoria avenae or Microdochium nivale. A method for detecting F. graminearum, F. culmorum, F. moniliforme, F. poae, F. avenaceum and M. nivale isolates is also provided which comprises isolating DNA from a plant leaf infected with at least one of the above pathogens and amplifying parts of the ITS sequence of the pathogen(s) by PCR using specific primers from within these sequences. The pathogen(s) are detected by visualising the amplified part of the ITS sequence

XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1549 CTTGGTCTTCGTGATGC 1567  
DB 19 CTGGCTTCTTCATCGATGC 1

RESULT 698  
AAV62539  
ID AAV62539 standard; DNA; 20 BP.  
XX AC AAV62539;  
XX 17-DEC-1998 (first entry)  
XX Ribosomal gene 5.85 rDNA specific primer ITS2.

XX Internal transcribed spacer; ITS; ribosomal RNA; Fusarium avenaceum;  
KW Fusarium culmorum; Fusarium graminearum; Fusarium moniliforme; plant;  
KW Septoria avenae; Microdochium nivale; Fusarium poae; fungal pathogen;  
KW PCR; nucleic acid detection; PCR primer; ss.

XX Synthetic.  
OS Fusarium sp.  
OS US5814453-A.  
XX 29-SEP-1998.

XX 02-JUL-1997; 97US-00887480.  
XX 19-APR-1995; 95WO-US004712.  
XX 15-OCT-1996; 96US-00722187.  
XX (NOVS ) NOVARTIS FINANCE CORP.

XX Beck JJ;  
XX WPI; 1998-541745/46.

XX DNA isolated from fungal RNA, and its internal transcribed spacer  
PT sequence - used for detecting fungal pathogens in plant tissue.

XX Example 6; Col 17; 56pp; English.

XX Sequences AAV62507 to AAV62566 represent species specific PCR primers for various fungal isolates used for fungal detection in the course of the invention. The primers are designed based on the internal transcribed spacer (ITS) sequences of the various fungal species. The invention provides a DNA molecule isolated from the ribosomal RNA gene region of a fungal pathogen, where the DNA molecule consists of an ITS sequence selected from ITS1 and ITS2 of Fusarium culmorum, Fusarium graminearum, Fusarium moniliforme, Septoria avenae or Microdochium nivale. A method for detecting F. graminearum, F. culmorum, F. moniliforme, F. poae, F. avenaceum and M. nivale isolates is also provided which comprises isolating DNA from a plant leaf infected with at least one of the above pathogens and amplifying parts of the ITS sequence of the pathogen(s) by PCR using specific primers from within these sequences. The pathogen(s) are detected by visualising the amplified part of the ITS sequence

SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTGGTCTTCGTGATGC 1567  
DB 2 CTGGCTTCTTCATCGATGC 20

RESULT 699

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AAV59027/c
ID AAV59027 standard; DNA; 20 BP.
XX AC
XX AAV59027;
XX DT
XX 25-MAR-2003 (revised)
XX 06-JAN-1999 (first entry)
XX DE
XX Internal transcribed spacer primer ITS3.
XX KW
XX Internal transcribed spacer; ITS; Microdochium; Fusarium; wheat pathogen;
XX fungal pathogen identification; infection identification; PCR primer; ss.
XX OS
XX Synthetic.
XX OS
XX Fusarium sp.
XX PN
XX US5827695-A.
XX PD
XX 27-OCT-1998.
XX XX
XX 04-AUG-1997; 97US-00905314.
XX PR
XX 04-AUG-1997; 97US-00905314.
XX PA
XX (NOVS ) NOVARTIS FINANCE CORP.
XX PI
XX Beck JJ;
XX DR
XX WPI; 1998-593995/50.
XX XX
XX Wheat pathogen internal transcribed spacer sequences - used as a basis
XX for primers for the species-specific polymerase chain reaction detection
XX of the pathogens.
XX PS
XX Example 2; Col 8; 20pp; English.
XX CC
XX This sequence represents a primer based on an internal transcribed spacer
XX (ITS) sequence of the invention. Primer pairs, based on the ITS
XX sequences, are used for the PCR amplification detection of wheat
XX Microdochium and Fusarium fungal pathogens, especially M. nivale, F.
XX graminearum, F. culmorum, F. avenaceum, F. poae, F. moniliforme or F.
XX roseum. The two different strains of fungi show different symptoms during
XX infection, which may or may not be due to infection. Early identification
XX of the strain causing the infection allows early, and more specific
XX fungicidal treatment. (Updated on 25-MAR-2003 to correct PF field.)
XX CC
XX (Updated on 25-MAR-2003 to correct PR field.)
XX XX
XX SQ
XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1549 CTTCGGTCTTCGTCGATGC 1567
XX ||| ||||| |||||
XX Db 2 CTTCGGTCTTCGTCGATGC 20
XX
XX RESULT 701
XX ID AAV43273/c
XX AC AAV43273;
XX DT
XX 26-OCT-1998 (first entry)
XX DE
XX PCR primer ITS3 used to isolate ITS regions.
XX KW
XX Internal transcribed spacer; ITS; detection; maize; fungal pathogen;
XX PCR primer; ss.
XX OS
XX Synthetic.
XX XX
XX EP859061-A2.
XX XX
XX 19-AUG-1998.
XX PD
XX 03-NOV-1997; 97EP-00810779.
XX PF
XX 01-NOV-1996; 96US-00742023.
XX PR
XX (NOVS ) NOVARTIS AG.
XX PA
XX Beck JJ;
XX PI
XX WPI; 1998-429687/37.
XX DR
XX XX

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AAV59027/c
ID AAV59027 standard; DNA; 20 BP.
XX AC
XX AAV59027;
XX DT
XX 25-MAR-2003 (revised)
XX 06-JAN-1999 (first entry)
XX DE
XX Internal transcribed spacer primer ITS3.
XX KW
XX Internal transcribed spacer; ITS; Microdochium; Fusarium; wheat pathogen;
XX fungal pathogen identification; infection identification; PCR primer; ss.
XX OS
XX Synthetic.
XX OS
XX Fusarium sp.
XX PN
XX US5827695-A.
XX PD
XX 27-OCT-1998.
XX XX
XX 04-AUG-1997; 97US-00905314.
XX PR
XX 04-AUG-1997; 97US-00905314.
XX PA
XX (NOVS ) NOVARTIS FINANCE CORP.
XX PI
XX Beck JJ;
XX DR
XX WPI; 1998-593995/50.
XX XX
XX Wheat pathogen internal transcribed spacer sequences - used as a basis
XX for primers for the species-specific polymerase chain reaction detection
XX of the pathogens.
XX PS
XX Example 5; Col 10; 20pp; English.
XX CC
XX This sequence represents a primer based on an internal transcribed spacer
XX (ITS) sequence of the invention. Primer pairs, based on the ITS
XX sequences, are used for the PCR amplification detection of wheat
XX Microdochium and Fusarium fungal pathogens, especially M. nivale, F.
XX graminearum, F. culmorum, F. avenaceum, F. poae, F. moniliforme or F.
XX roseum. The two different strains of fungi show different symptoms during
XX infection, which may or may not be due to infection. Early identification
XX of the strain causing the infection allows early, and more specific
XX fungicidal treatment. (Updated on 25-MAR-2003 to correct PF field.)
XX CC
XX (Updated on 25-MAR-2003 to correct PR field.)
XX XX
XX SQ
XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1549 CTTCGGTCTTCGTCGATGC 1567
XX ||| ||||| |||||
XX Db 19 CTTCGGTCTTCGTCGATGC 1
XX
XX RESULT 700
XX ID AAV59024
XX AC AAV59024;
XX DT
XX 25-MAR-2003 (revised)
XX 06-JAN-1999 (first entry)
XX DE
XX Internal transcribed spacer primer ITS28.
XX KW
XX Internal transcribed spacer; ITS; Microdochium; Fusarium; wheat pathogen;
XX fungal pathogen identification; infection identification; PCR primer; ss.
XX OS
XX Synthetic.

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PT New internal transcribed spacer sequences of maize fungal pathogens and  
PT primers and primer pairs - used to detect pathogens e.g. Helminthosporium  
XX carbonum, Cercospora zeae-maydis and Kabatiella zeae.  
XX Example 2; Page 11; 49pp; English.  
XX  
CC PCR primers AAV43271-76 were used to isolate internal transcribed spacer  
CC (ITS) regions from Helminthosporium turcicum isolates 6586, 26306 and  
CC 6402, H. maydis isolates 6921, 11534 and 24772, H. carbonum isolates 5870  
CC and 16185, Kabatiella zeae isolates 56351, 18594 and 5125 and Cercospora  
CC zeae-maydis isolates 5860, POPS 12 and Ladder 3-1. The specification  
CC describes a method for the detection of a maize fungal pathogen. The  
CC method comprises isolating DNA from a plant leaf infected with a  
CC pathogen, subjecting the DNA to PCR amplification using at least one  
CC primer derived from the ITS sequence (see AAV43277-303)  
XX  
SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 1549 CTTCGGTCTTCGTCGATGC 1567  
DB 19 CTGCGTTCCTCATCGATGC 1  
  
RESULT 702  
AAV43272  
ID AAV43272 standard; DNA; 20 BP.  
AC AAV43272;  
XX  
DT 26-OCT-1998 (first entry)  
XX  
DE PCR primer ITS2 used to isolate ITS regions.  
XX  
KW Internal transcribed spacer; ITS; detection; maize; fungal pathogen;  
KW PCR primer; ss.  
XX  
OS Synthetic.  
XX  
XX EP859061-A2.  
XX  
XX 19-AUG-1998.  
XX  
XX 03-NOV-1997; 97EP-00810779.  
XX  
XX 01-NOV-1996; 96US-00742023.  
XX  
XX (NOVS ) NOVARTIS AG.  
XX  
XX Beck JU;  
XX  
XX WPI; 1998-429687/37.  
XX  
XX New internal transcribed spacer sequences of maize fungal pathogens and  
XX primers and primer pairs - used to detect pathogens e.g. Helminthosporium  
XX carbonum, Cercospora zeae-maydis and Kabatiella zeae.  
XX Example 2; Page 8; 49pp; English.  
XX  
XX PCR primers AAV43271-76 were used to isolate internal transcribed spacer  
XX (ITS) regions from Helminthosporium turcicum isolates 6586, 26306 and  
XX 6402, H. maydis isolates 6921, 11534 and 24772, H. carbonum isolates 5870  
XX and 16185, Kabatiella zeae isolates 56351, 18594 and 5125 and Cercospora  
XX zeae-maydis isolates 5860, POPS 12 and Ladder 3-1. The specification  
XX describes a method for the detection of a maize fungal pathogen. The  
XX method comprises isolating DNA from a plant leaf infected with a  
XX pathogen, subjecting the DNA to PCR amplification using at least one  
XX primer derived from the ITS sequence (see AAV43277-303)  
XX  
SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 1549 CTTCGGTCTTCGTCGATGC 1567  
DB 2 CTGCGTTCCTCATCGATGC 20  
  
RESULT 703  
AAV11551  
ID AAV11551 standard; cDNA; 20 BP.  
AC AAV11551;  
XX  
XX 14-SEP-1998 (first entry)  
XX  
XX Human lipid metabolic pathway h-LMP-1 gene PCR primer.  
XX  
XX Lipid metabolic pathway; h-LMP-1 gene; cardiovascular disease;  
KW atherosclerosis; biliary tract disorder; gall stone; therapy; diagnosis;  
KW human; PCR; primer; ss.  
XX  
XX Synthetic.  
OS  
XX Homo sapiens.  
XX  
XX WO9809979-A1.  
XX  
XX 12-MAR-1998.  
XX  
XX 28-AUG-1997; 97WO-US015195.  
XX  
XX 04-SEP-1996; 96US-00707399.  
XX  
XX (MILL-) MILLENNIUM PHARM INC.  
XX  
XX Gimeno CJ, Acton S;  
XX  
XX WPI; 1998-193545/17.  
XX  
XX DNA encoding lipid metabolic pathway polypeptide(s) - useful for  
XX treatment of cardiovascular disease or modulation of lipid uptake or  
XX metabolism.  
XX  
XX Disclosure; Page 85; 102pp; English.  
XX  
XX This PCR primer anneals to bases 371-390 of a human lipid metabolic  
XX pathway h-LMP-1 cDNA clone (see AAV11548) isolated from human breast  
XX cDNA. It can be used in PCR reactions to clone LMP homologues in other  
XX cell types, e.g. from other tissues and from other mammalian organisms.  
XX LMP nucleic acids and polypeptides (see AAW5888) are useful for  
XX developing methods for treatment of cardiovascular diseases or for  
XX modulating lipid uptake or metabolism, and in drug screening assays  
XX  
XX Sequence 20 BP; 9 A; 3 C; 7 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 864 GAAGCAGTACCTCGATGAC 882  
DB 2 GAAGAGACACGATGAC 20  
  
RESULT 704  
AAV42503/c  
ID AAV42503 standard; DNA; 20 BP.  
XX  
XX AAV42503;  
XX  
XX 02-OCT-1998 (first entry)  
XX  
XX

XX PCR primer 2 used to amplify human loci DYS7 DNA.  
 XX Assay; Y chromosome; Y chromosome loci; human; male fertility; detection;  
 KW deletion mutation; male infertility; PCR primer; ss.  
 XX Synthetic.  
 OS Homo sapiens.  
 XX WO9824937-A2.  
 XX 11-JUN-1998.  
 XX 04-DEC-1997; 97WO-US023136.  
 XX 04-DEC-1996; 96US-00753979.  
 XX (PROM-) PROMEGA CORP.  
 XX First MK, Muallem A;  
 XX WPI; 1998-333352/29.  
 XX Assessing Y chromosome integrity in predicting human male infertility -  
 PT by amplifying specific regions of human Y chromosome linked to normal  
 PT fertility by multiplex PCR and detecting deletion mutations.  
 XX Claim 2; Page 35; 47pp; English.  
 XX PCR primers AAV42472-511 are used in a method for assessing the integrity  
 CC of a Y chromosome. Genomic DNA, or blood, from a subject is combined with  
 CC several distinct oligonucleotide primer pairs capable of simultaneously  
 CC priming several human Y chromosome loci which are linked to normal  
 CC fertility in human males. The present primer pair (AAV42502-03) amplify  
 CC loci DYS7. The primer pairs are amplified by multiplex PCR, yielding  
 CC amplified chromosomal DNA fragments which are isolated and compared with  
 CC those from normal male subjects. The method is useful to detect deletion  
 CC mutations on a Y chromosome which are predictive of human male  
 CC infertility  
 XX Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1483 CACAAACTTCTCGACACTA 1501  
 Db 19 CAAAAAATCTTCTGAGACCA 1  
 RESULT 705  
 AAV22643/C  
 ID AAV22643 standard; DNA; 20 BP.  
 XX AAV22643;  
 AC AAV22643;  
 XX 10-JUL-1998 (first entry)  
 DT PCR primer specific for Phytophthora infestans sequences.  
 XX Phytophthora; potato; late-blight; P. infestans; P. erythroseptica;  
 KW P. nicotianae; pink rot; detection; disease; PCR primer; ss.  
 XX Synthetic.  
 OS Phytophthora infestans.  
 OS WO9808862-A1.  
 XX 05-MAR-1998.  
 PD 28-AUG-1997; 97WO-US015143.  
 XX

PR 28-AUG-1996; 96US-00704207.  
 XX (USDA ) US SEC OF AGRIC.  
 XX Tooley P, Bunyard B, Carras M, Hatziloukas E;  
 XX WPI; 1998-179378/16.  
 XX Oligonucleotide primers for PCR detection of Phytophthora spp. - e.g. to  
 PT detect P. infestans, which causes potato light blight and distinguish  
 PT from P. erythroseptica and P. nicotianae, which cause pink rot.  
 XX Claim 2; Page 27; 40pp; English.  
 XX PCR primers AAV22642-46 are specific for Phytophthora species which  
 CC infect potatoes and cause diseases such as late-blight. PCR primers  
 CC AAV22642-43 amplify a 456 bp fragment from P. infestans, PCR primers  
 CC AAV22644-45 amplify a 136 bp fragment from P. erythroseptica, and PCR  
 CC primers AAV22643 and AAV22646 amplify a 455 bp fragment from P.  
 CC nicotianae. The primer sets are useful for detecting Phytophthora species  
 CC by PCR. Phytophthora species infecting potatoes may result in late blight  
 CC (caused by P. infestans) or in pink rot (caused by P. erythroseptica and  
 CC P. nicotianae), and the primers can detect these diseases and  
 CC differentiate between them  
 XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1549 CTTGCGTCTTCGTCGATGC 1567  
 Db 19 CTTGCGTCTTCGTCGATGC 1  
 RESULT 706  
 AAV18199/C  
 ID AAV18199 standard; DNA; 20 BP.  
 XX AAV18199;  
 AC AAV18199;  
 XX 28-AUG-1998 (first entry)  
 DT Primer for Fanconi anaemia of complementation group A gene.  
 XX Fanconi anaemia of complementation group A; FA-A; Genetic defect;  
 KW prenatal FA-A; FA-A carrier detection; disease diagnosis; PCR primer; ss.  
 XX Synthetic.  
 OS Homo sapiens.  
 XX WO9814462-A1.  
 XX 09-APR-1998.  
 PD 03-OCT-1997; 97WO-US018010.  
 XX 04-OCT-1996; 96US-00726012.  
 PR (FANC-) FANCONI ANEMIA RES FUND INC.  
 XX Joenje H, Lo Ten Foe JR;  
 XX WPI; 1998-240012/21.  
 XX DNA for Fanconi Anaemia complementation group A - useful for, e.g.  
 PT developing products for diagnosis and screening of disease and gene  
 PT therapy.  
 XX Disclosure; Page 11; 63pp; English.  
 XX This sequence represents a PCR primer for the DNA encoding the Fanconi  
 CC

CC anaemia of complementation group A (FA-A) protein of the invention. The  
CC amplified DNA's may be used to complement a genetic defect in a cell  
CC (especially the FA-A gene). The products can be used for screening  
CC (especially prenatal FA-A), detection of FA-A carriers and FA-A disease  
CC diagnosis  
XX  
SQ Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 259 GAGGCCCCACACGCTG 277  
DB 19 GAGTCCCCACATGCTG 1  
RESULT 707  
AAV70045/c  
ID AAV70045 standard; DNA; 20 BP.  
XX  
AC AAV70045;  
XX  
DT 04-FEB-1999 (first entry)  
XX  
DE Rat c-fos protein antisense oligonucleotide #99.  
XX  
KW Rat; c-fos; c-jun; activating protein 1; AP-1; diagnosis; metastasis;  
KW antisense oligonucleotide; phosphorothioate; regulation;  
KW malignant tumour; cell cycle expression; hyperproliferative disease; ss.  
XX  
OS Synthetic.  
OS Rattus sp.  
XX  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /tag= a  
FT /note= "phosphorothioate linkages"  
XX  
PN W09846272-A1.  
XX  
PD 22-OCT-1998.  
XX  
PF 14-APR-1998; 98WO-US007386.  
XX  
PR 14-APR-1997; 97US-00837201.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Dean NM, McKay R, Miraglia L, Baker B;  
XX  
DR WPI; 1998-609906/51.  
XX  
XX  
PT Antisense oligonucleotides regulating Activating Protein 1 subunits -  
PT hybridise with c-fos and c-jun mRNA, used for regulating metastasis, cell  
PT cycle expression and hyperproliferative disease.  
XX  
XX Example 9; Page 57; 120pp; English.  
XX  
CC AAV70042 to AAV70052 represent antisense oligonucleotides which are  
CC specifically hybridisable with a region of a nucleic acid encoding rat c-  
CC Fos protein. The antisense compound regulates the expression of the c-Fos  
CC protein. The present invention also describes antisense oligonucleotides  
CC which regulate the c-Jun protein. The antisense oligonucleotides are used  
CC for the diagnosis and treatment of diseases or disorders associated with  
CC Activating Protein 1 expression, of which c-Fos and c-Jun are subunits.  
CC The antisense oligonucleotides are used in compositions as c-Fos and/or c-  
CC -Jun together with a carrier and a chemotherapeutic agent. They are used  
CC to regulate the expression of c-Fos or c-Jun in cells or tissues.  
CC preferably by inhibiting metastasis. They also regulate cell cycle  
CC expression and can be used to treat an animal with, or being prone to, a  
CC hyperproliferative disease  
XX

SQ Sequence 20 BP; 2 A; 2 C; 11 G; 5 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1720 AGCCATGTTTACCTGCCCA 1738  
DB 19 AGCCATCTCCACCAGCCCA 1  
RESULT 708  
AAV24006/c  
ID AAV24006 standard; DNA; 20 BP..  
XX  
AC AAV24006;  
XX  
DT 27-AUG-2003 (revised)  
DT 06-AUG-1998 (first entry)  
XX  
DE Primer ITS3 for Candida nucleic acid sequences.  
XX  
KW PCR primer; Candida detection; Aspergillus; systemic candidiasis; ss.  
OS Synthetic.  
OS Candida.  
XX  
PN W09811257-A1.  
XX  
PD 19-MAR-1998.  
XX  
PF 15-SEP-1997; 97WO-US016423.  
XX  
PR 16-SEP-1996; 96US-0026387P.  
XX  
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
XX  
PI Morrison CJ, Reiss E, Holloway B, Shin JH;  
XX  
DR WPI; 1998-216957/19.  
XX  
PT Probes for detection of Candida species - useful for diagnosis of  
PT systemic candidiasis.  
XX  
PS Example 1; Page 16; 55pp; English.  
XX  
CC This sequence represents a primer for Candida nucleic acid sequences. The  
CC amplified sequences are recognised by the probes of the invention. The  
CC probes can be used in the method of the invention for the detection of  
CC Aspergillus sp. and Candida sp. in a sample. The probes can be used to  
CC diagnose systemic candidiasis. (Updated on 27-AUG-2003 to correct OS  
CC field.)  
XX  
SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1549 CTTCGGTCTTCGTGATGC 1567  
DB 19 CTGCGTCTTCATCGATGC 1  
RESULT 709  
AAV24009  
ID AAV24009 standard; DNA; 20 BP.  
XX  
AC AAV24009;  
XX  
DT 27-AUG-2003 (revised)  
DT 06-AUG-1998 (first entry)  
XX

DE Primer ITS2 for Candida nucleic acid sequences.  
 XX PCR primer; Candida detection; Aspergillus; systemic candidiasis; ss.  
 XX Synthetic.  
 OS Candida.  
 OS WO9811257-A1.  
 PN 19-MAR-1998.  
 XX 15-SEP-1997; 97WO-US016423.  
 PF 16-SEP-1996; 96US-0026387P.  
 PR (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
 XX Morrison CJ, Reiss E, Holloway B, Shin JH;  
 XX WPI; 1998-216957/19.  
 DR Probes for detection of Candida species - useful for diagnosis of  
 PT systemic candidiasis.  
 PT Example 2; Page 47; 55pp; English.  
 PS This sequence represents a primer for Candida nucleic acid sequences. The  
 CC amplified sequences are recognised by the probes of the invention. The  
 CC probes can be used in the method of the invention for the detection of  
 CC Aspergillus sp. and Candida sp. in a sample. The probes can be used to  
 CC diagnose systemic candidiasis. (Updated on 27-AUG-2003 to correct OS  
 CC field.)  
 XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1549 CTTCGGTCTTCGTCGATGC 1567  
 DB 2 CTGCGTCTTCATCGATGC 20  
 RESULT 710  
 AAT89974/C  
 ID AAT89974 standard; DNA; 20 BP.  
 XX AAT89974;  
 AC AAT89974;  
 XX 20-MAR-1998 (first entry)  
 DT Candida albicans ITS2 rDNA PCR primer ITS3.  
 DE ITS2 rDNA; systemic candidiasis; pathogen; diagnosis; PCR primer; ss.  
 XX Synthetic.  
 OS Candida albicans.  
 OS US5688644-A.  
 PN 18-NOV-1997.  
 PD 26-APR-1995; 95US-00429520.  
 PF 20-MAY-1993; 93US-00065845.  
 PR (USGO ) US GOVERNMENT.  
 PA Lasker B, Reiss E, Zakroff S, Lott TJ, Morrison CJ;  
 XX WPI; 1998-007977/01.  
 DR Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1549 CTTCGGTCTTCGTCGATGC 1567  
 DB 2 CTGCGTCTTCATCGATGC 20  
 RESULT 710  
 AAT89974/C  
 ID AAT89974 standard; DNA; 20 BP.  
 XX AAT89974;  
 AC AAT89974;  
 XX 20-MAR-1998 (first entry)  
 DT Candida albicans ITS2 rDNA PCR primer ITS3.  
 DE ITS2 rDNA; systemic candidiasis; pathogen; diagnosis; PCR primer; ss.  
 XX Synthetic.  
 OS Candida albicans.  
 OS US5688644-A.  
 PN 18-NOV-1997.  
 PD 26-APR-1995; 95US-00429520.  
 PF 20-MAY-1993; 93US-00065845.  
 PR (USGO ) US GOVERNMENT.  
 PA Lasker B, Reiss E, Zakroff S, Lott TJ, Morrison CJ;  
 XX WPI; 1998-007977/01.

PT Diagnosis of systemic candidiasis by hybridisation assay - using probes  
 PT specific for new or known Candida DNA sequences.  
 XX Example 1; Col 6; 11pp; English.  
 PS PCR primers AAT89973-T89976 and AAT89982 are used to amplify the ITS2  
 CC region of Candida albicans. Primer AAT89974 is approximately 25bp from  
 CC the end of the 5.8S subunit. This amplified region is used in a novel  
 CC method for diagnosing systemic candidiasis and comprises hybridising DNA  
 CC released from lysed Candida cells in a blood sample with a probe specific  
 CC for the ITS2 region. Probes derived from this region can be used for  
 CC detecting pathogenic Candida spp. such as C. tropicalis, C. glabrata, C.  
 CC krusei, C. parapsilosis or C. albicans in immunocompromised hosts. One  
 CC Candida cell per microlitre of blood can be detected  
 XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1549 CTTCGGTCTTCGTCGATGC 1567  
 DB 19 CTGCGTCTTCATCGATGC 1  
 RESULT 711  
 AAT89976  
 ID AAT89976 standard; DNA; 20 BP.  
 XX AAT89976;  
 AC AAT89976;  
 XX 20-MAR-1998 (first entry)  
 DT Candida albicans ITS2 rDNA PCR primer 1.  
 DE ITS2 rDNA; systemic candidiasis; pathogen; diagnosis; PCR primer; ss.  
 XX Synthetic.  
 OS Candida albicans.  
 OS US5688644-A.  
 PN 18-NOV-1997.  
 PD 26-APR-1995; 95US-00429520.  
 PF 20-MAY-1993; 93US-00065845.  
 PR (USGO ) US GOVERNMENT.  
 PA Lasker B, Reiss E, Zakroff S, Lott TJ, Morrison CJ;  
 XX WPI; 1998-007977/01.  
 DR Diagnosis of systemic candidiasis by hybridisation assay - using probes  
 PT specific for new or known Candida DNA sequences.  
 XX Disclosure; Col 6; 11pp; English.  
 PS PCR primers AAT89973-T89976 and AAT89982 are used to amplify the ITS2  
 CC region of Candida albicans. This amplified region is used in a novel  
 CC method for diagnosing systemic candidiasis and comprises hybridising DNA  
 CC released from lysed Candida cells in a blood sample with a probe specific  
 CC for the ITS2 region. Probes derived from this region can be used for  
 CC detecting pathogenic Candida spp. such as C. tropicalis, C. glabrata, C.  
 CC krusei, C. parapsilosis or C. albicans in immunocompromised hosts. One  
 CC Candida cell per microlitre of blood can be detected  
 XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;

```
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1549 CTTCGGTCTTCGTCGATGC 1567
    |||||
Db 2 CTGCGTCTTCATCGATGC 20
    |||||

RESULT 712
AAAX17950/C
ID AAAX17950 standard; DNA; 20 BP.
XX
AC AAAX17950;
XX
DT 11-MAY-1999 (first entry)
XX
DE Anti-CMV oligonucleotide #15104.
XX
KW Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
KW cytomegalovirus; inhibition; replication; sugar modification;
KW phosphorothioate; infection; retinitis; ss.
XX
OS Synthetic.
OS Human herpesvirus 5.
XX
PH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /*note= "contains phosphorothioate internucleotide
FT linkages"
FT modified_base 1..20
FT /*tag= b
FT /*note= "all C bases are 5'-methyl-cytosine"
FT modified_base 1..7
FT /*tag= b
FT /*note= "2'-methoxyethoxy sugar moieties"
FT modified_base 15..20
FT /*tag= b
FT /*note= "2'-methoxyethoxy sugar moieties"
XX
PN WO9845314-A1.
XX
PD 15-OCT-1998.
XX
PF 07-APR-1998; 98WO-US006895.
XX
PR 09-APR-1997; 97US-00838715.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Draper KG, Kisner DL, Anderson KP, Chapman S;
XX
DR WPI; 1998-568330/48.
XX
PF New antisense oligonucleotides that target cytomegalovirus nucleic acid -
PT particularly including 2-methoxyethoxy sugar modifications, especially
PT for treating viral retinitis, with long-lasting retention in the retina.
XX
PS Claim 7; Page 32; 99pp; English.
XX
CC This antisense oligonucleotide is targeted to a nucleic acid sequence in
CC the IE (immediate early) 2 region of the cytomegalovirus (CMV) genome and
CC is able to inhibit CMV replication. Optionally the oligonucleotide
CC include at least one 2'-(2-methoxyethoxy) sugar modification or
CC phosphorothioate internucleotide linkages. The oligonucleotides (AAAX17861
CC -X17924) are also used to inhibit CMV infections (by in vivo or in vitro
CC contact with cells, tissues or body fluids), especially to treat or
CC prevent CMV infections, particularly retinitis
XX
SQ Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY 131 GGATGAAGAAGATCAAAACG 149
    |||||
Db 20 GCAAGAAGAAGAGCAAAACG 2
    |||||

RESULT 713
AAAX17890/C
ID AAAX17890 standard; DNA; 20 BP.
XX
AC AAAX17890;
XX
DT 11-MAY-1999 (first entry)
XX
DE Anti-CMV oligonucleotide #5476.
XX
KW Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
KW cytomegalovirus; inhibition; replication; sugar modification;
KW phosphorothioate; infection; retinitis; ss.
XX
OS Synthetic.
OS Human herpesvirus 5.
XX
PN WO9845314-A1.
XX
PD 15-OCT-1998.
XX
PF 07-APR-1998; 98WO-US006895.
XX
PR 09-APR-1997; 97US-00838715.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Draper KG, Kisner DL, Anderson KP, Chapman S;
XX
DR WPI; 1998-568330/48.
XX
PF New antisense oligonucleotides that target cytomegalovirus nucleic acid -
PT particularly including 2-methoxyethoxy sugar modifications, especially
PT for treating viral retinitis, with long-lasting retention in the retina.
XX
PS Claim 7; Page 30; 99pp; English.
XX
CC Antisense oligonucleotides (AAAX17861-X17924) are targeted to a nucleic
CC acid (AAAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA
CC polymerase of cytomegalovirus (CMV) and are able to inhibit CMV
CC replication. Optionally the oligonucleotides include at least one 2'-(2-
CC methoxyethoxy) sugar modification or phosphorothioate internucleotide
CC linkages. The oligonucleotides are used to inhibit CMV infections (by in
CC vivo or in vitro contact with cells, tissues or body fluids), especially
CC to treat or prevent CMV infections, particularly retinitis
XX
SQ Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 131 GGATGAAGAAGATCAAAACG 149
    |||||
Db 20 GCAAGAAGAAGAGCAAAACG 2
    |||||

RESULT 714
AAZ18075
ID AAZ18075 standard; DNA; 20 BP.
XX
AC AAZ18075;
XX
DT 11-OCT-1999 (first entry)
XX
DE YAP 5 gene specific primer.
XX
```

KW Genetic proximity; gene expression; cell characterisation; homeobox gene;  
KW Genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;  
KW Kinase gene; protein phosphatase; P450; steroid receptor; cadherin;  
KW primer; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
XX WO9934016-A2.  
XX  
XX PD 08-JUL-1999.  
XX  
XX PF 28-DEC-1998; 98WO-IL000625.  
XX  
XX PR 29-DEC-1997; 97IL-00122793.  
XX  
XX PR 16-OCT-1998; 98IL-00126627.  
XX  
XX PA (GENE-) GENENA LTD.  
XX  
XX PI Vidar B;  
XX  
XX DR WPI; 1999-419113/35.  
XX  
XX DR P-PSDB; AAY14609.  
XX  
XX PT Identifying and characterizing cells by comparing the pattern of gene  
XX expression in a selected gene family.  
XX  
XX PS Claim 4; Page 41; 102pp; English.  
XX  
XX CC The invention provides a new method for identifying and characterising  
XX cells. The method for determining the genetic proximity of a first cell  
XX and a second cell comprises: (a) obtaining the first cell and the second  
XX cell; (b) determining in the first cell and the second cell the pattern  
XX of expression of genes in a selected gene family; and (c) calculating a  
XX proximity index using a specified formula. The methods can be used for  
XX characterising cells, e.g. for determining the origin of a cell, its  
XX genetic status, whether it carries a genetic defect, or whether it is  
XX transformed. They can be used for detecting a selected genetic defect in  
XX an individual, e.g. a fetus. They can also be used for determining the  
XX effect of a selected treatment on a test cell. They can also be used for  
XX obtaining cells capable of expressing an homeobox related desired  
XX property. The method uses reverse transcriptase polymerase chain reaction  
XX in the RT-PCR reactions to determine the pattern of gene expression in a  
XX gene family. Sequences AAZ17803-Z18342 represent primers that can be used  
XX (RT-PCR) for determining the pattern of gene expression in a selected  
XX gene family. Sequences AAZ17803-Z18342 represent primers that can be used  
XX in the RT-PCR reactions to determine the pattern of gene expression. The  
XX gene family can be selected from a set of homeobox genes, kinase genes,  
XX protein phosphatase genes, P450 enzyme genes, steroid receptor  
XX superfamily genes or cadherin superfamily genes  
XX  
XX SQ Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 971 TACACCGAGACCTCAAGCC 989  
DB 2 TTCACAGAGCGTCAAGCC 20  
RESULT 715  
AAZ18074  
ID AAZ18074 standard; DNA; 20 BP.  
XX  
XX AC AAZ18074;  
XX  
XX DT 11-OCT-1999 (first entry)  
XX  
XX DE MAP 4 gene specific primer.  
XX  
XX KW Genetic proximity; gene expression; cell characterisation; homeobox gene;  
XX Genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;  
XX Kinase gene; protein phosphatase; P450; steroid receptor; cadherin;  
XX primer; ss.  
XX  
XX OS Synthetic.

KW primer; ss.  
XX  
XX OS Synthetic.  
OS Homo sapiens.  
XX  
XX FN WO9934016-A2.  
XX  
XX PD 08-JUL-1999.  
XX  
XX PF 28-DEC-1998; 98WO-IL000625.  
XX  
XX PR 29-DEC-1997; 97IL-00122793.  
XX  
XX PR 16-OCT-1998; 98IL-00126627.  
XX  
XX PA (GENE-) GENENA LTD.  
XX  
XX PI Vidar B;  
XX  
XX DR WPI; 1999-419113/35.  
XX  
XX DR P-PSDB; AAY14609.  
XX  
XX PT Identifying and characterizing cells by comparing the pattern of gene  
XX expression in a selected gene family.  
XX  
XX PS Claim 4; Page 41; 102pp; English.  
XX  
XX CC The invention provides a new method for identifying and characterising  
XX cells. The method for determining the genetic proximity of a first cell  
XX and a second cell comprises: (a) obtaining the first cell and the second  
XX cell; (b) determining in the first cell and the second cell the pattern  
XX of expression of genes in a selected gene family; and (c) calculating a  
XX proximity index using a specified formula. The methods can be used for  
XX characterising cells, e.g. for determining the origin of a cell, its  
XX genetic status, whether it carries a genetic defect, or whether it is  
XX transformed. They can be used for detecting a selected genetic defect in  
XX an individual, e.g. a fetus. They can also be used for determining the  
XX effect of a selected treatment on a test cell. They can also be used for  
XX obtaining cells capable of expressing an homeobox related desired  
XX property. The method uses reverse transcriptase polymerase chain reaction  
XX in the RT-PCR reactions to determine the pattern of gene expression in a  
XX gene family. Sequences AAZ17803-Z18342 represent primers that can be used  
XX (RT-PCR) for determining the pattern of gene expression in a selected  
XX gene family. Sequences AAZ17803-Z18342 represent primers that can be used  
XX in the RT-PCR reactions to determine the pattern of gene expression. The  
XX gene family can be selected from a set of homeobox genes, kinase genes,  
XX protein phosphatase genes, P450 enzyme genes, steroid receptor  
XX superfamily genes or cadherin superfamily genes  
XX  
XX SQ Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 971 TACACCGAGACCTCAAGCC 989  
DB 2 TTCACAGAGCGTCAAGCC 20  
RESULT 716  
AAZ18077  
ID AAZ18077 standard; DNA; 20 BP.  
XX  
XX AC AAZ18077;  
XX  
XX DT 11-OCT-1999 (first entry)  
XX  
XX DE MAP 6 gene specific primer.  
XX  
XX KW Genetic proximity; gene expression; cell characterisation; homeobox gene;  
XX Genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;  
XX Kinase gene; protein phosphatase; P450; steroid receptor; cadherin;  
XX primer; ss.  
XX  
XX OS Synthetic.

```
OS Homo sapiens.
XX WO9934016-A2.
XX
XX PD
XX 08-JUL-1999.
XX
XX PF
XX 28-DEC-1998; 98WO-IL000625.
XX
XX PR
XX 29-DEC-1997; 97JL-00122793.
XX
XX PR
XX 16-OCT-1998; 98JL-00126627.
XX
XX PA (GENE-) GENENA LTD.
XX
XX PI
XX Vider B;
XX
XX DR
XX WPI; 1999-419113/35.
XX
XX DR
XX P-PSDB; AAY14612.
XX
XX PT
XX Identifying and characterizing cells by comparing the pattern of gene
XX expression in a selected gene family.
XX
XX PS
XX Claim 4; Page 41; 102pp; English.
XX
XX CC
XX The invention provides a new method for identifying and characterising
XX cells. The method for determining the genetic proximity of a first cell
XX and a second cell comprises: (a) obtaining the first cell and the second
XX cell; (b) determining in the first cell and the second cell the pattern
XX of expression of genes in a selected gene family; and (c) calculating a
XX proximity index using a specified formula. The methods can be used for
XX characterising cells, e.g. for determining the origin of a cell, its
XX genetic status, whether it carries a genetic defect, or whether it is
XX transformed. They can be used for detecting a selected genetic defect in
XX an individual, e.g. a fetus. They can also be used for determining the
XX effect of a selected treatment on a test cell. They can also be used for
XX obtaining cells capable of expressing an homeobox related desired
XX property. The method uses reverse transcriptase polymerase chain reaction
XX (RT-PCR) for determining the pattern of gene expression in a selected
XX gene family. Sequences AA217803-Z18342 represent primers that can be used
XX in the RT-PCR reactions to determine the pattern of gene expression. The
XX gene family can be selected from a set of homeobox genes, kinase genes,
XX protein phosphatase genes, P450 enzyme genes, steroid receptor
XX superfamily genes or cadherin superfamily genes
XX
XX SQ
XX Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 971 TACACCGAGACCTCAAGCC 989
XX 2 TTCCACAGAGACGCTCAAGCC 20
XX
XX DB
XX
XX RESULT 717
XX AA218193
XX ID AA218193 standard; DNA; 20 BP.
XX
XX AC
XX AA218193;
XX
XX DT
XX 11-OCT-1999 (first entry)
XX
XX DE
XX Serine threonine kinase gene specific primer 240.
XX
XX KW
XX Genetic proximity; gene expression; cell characterisation; homeobox gene;
XX genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
XX kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
XX primer; ss.
XX
XX XX
XX Synthetic.
XX OS
XX Homo sapiens.
XX
XX PN
XX WO9934016-A2.
XX
XX PD
```

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XX PD
XX 08-JUL-1999.
XX
XX PF
XX 28-DEC-1998; 98WO-IL000625.
XX
XX PR
XX 29-DEC-1997; 97JL-00122793.
XX
XX PR
XX 16-OCT-1998; 98JL-00126627.
XX
XX PA (GENE-) GENENA LTD.
XX
XX PI
XX Vider B;
XX
XX DR
XX WPI; 1999-419113/35.
XX
XX DR
XX P-PSDB; AAY14728.
XX
XX PT
XX Identifying and characterizing cells by comparing the pattern of gene
XX expression in a selected gene family.
XX
XX PS
XX Claim 4; Page 47; 102pp; English.
XX
XX CC
XX The invention provides a new method for identifying and characterising
XX cells. The method for determining the genetic proximity of a first cell
XX and a second cell comprises: (a) obtaining the first cell and the second
XX cell; (b) determining in the first cell and the second cell the pattern
XX of expression of genes in a selected gene family; and (c) calculating a
XX proximity index using a specified formula. The methods can be used for
XX characterising cells, e.g. for determining the origin of a cell, its
XX genetic status, whether it carries a genetic defect, or whether it is
XX transformed. They can be used for detecting a selected genetic defect in
XX an individual, e.g. a fetus. They can also be used for determining the
XX effect of a selected treatment on a test cell. They can also be used for
XX obtaining cells capable of expressing an homeobox related desired
XX property. The method uses reverse transcriptase polymerase chain reaction
XX (RT-PCR) for determining the pattern of gene expression in a selected
XX gene family. Sequences AA217803-Z18342 represent primers that can be used
XX in the RT-PCR reactions to determine the pattern of gene expression. The
XX gene family can be selected from a set of homeobox genes, kinase genes,
XX protein phosphatase genes, P450 enzyme genes, steroid receptor
XX superfamily genes or cadherin superfamily genes
XX
XX SQ
XX Sequence 20 BP; 5 A; 9 C; 4 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 971 TACACCGAGACCTCAAGCC 989
XX 2 TCCACCGAGACCTCAAGCC 20
XX
XX DB
XX
XX RESULT 718
XX AA218198
XX ID AA218198 standard; DNA; 20 BP.
XX
XX AC
XX AA218198;
XX
XX DT
XX 11-OCT-1999 (first entry)
XX
XX DE
XX Serine threonine kinase gene specific primer 245.
XX
XX KW
XX Genetic proximity; gene expression; cell characterisation; homeobox gene;
XX genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
XX kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
XX primer; ss.
XX
XX XX
XX Synthetic.
XX OS
XX Homo sapiens.
XX
XX PN
XX WO9934016-A2.
XX
XX PD
XX 08-JUL-1999.
XX
```

PF 28-DEC-1998; 98WO-IL000625.  
 XX  
 PR 29-DEC-1997; 97IL-00122793.  
 PR 16-OCT-1998; 98IL-00126627.  
 XX  
 PA (GENE-) GENENA LTD.  
 XX  
 PI Vider B;  
 XX  
 DR WPI; 1999-419:113/35.  
 DR P-PSDB; AAY14732.

XX Identifying and characterizing cells by comparing the pattern of gene  
 PT expression in a selected gene family.  
 XX

PS Claim 4; Page 47; 102pp; English.

XX The invention provides a new method for identifying and characterising  
 CC cells. The method for determining the genetic proximity of a first cell  
 CC and a second cell comprises: (a) obtaining the first cell and the second  
 CC cell; (b) determining in the first cell and the second cell the pattern  
 CC of expression of genes in a selected gene family; and (c) calculating a  
 CC proximity index using a specified formula. The methods can be used for  
 CC characterising cells, e.g. for determining the origin of a cell, its  
 CC genetic status, whether it carries a genetic defect, or whether it is  
 CC transformed. They can be used for detecting a selected genetic defect in  
 CC an individual, e.g. a fetus. They can also be used for determining the  
 CC effect of a selected treatment on a test cell. They can also be used for  
 CC obtaining cells capable of expressing an homeobox related desired  
 CC property. The method uses reverse transcriptase polymerase chain reaction  
 CC (RT-PCR) for determining the pattern of gene expression in a selected  
 CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used  
 CC in the RT-PCR reactions to determine the pattern of gene expression. The  
 CC gene family can be selected from a set of homeobox genes, kinase genes,  
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor  
 CC superfamily genes or cadherin superfamily genes

XX SQ Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 971 TACACCGAGACTCAAGCC 989  
 Db 2 TCACCGAGACTCAAGTC 20

RESULT 719  
 AAV70875/C  
 ID AAV70875 standard; DNA; 20 BP.

XX AC AAV70875;  
 XX  
 DT 26-FEB-1999 (first entry)

XX PCR primer ITS3 for ITS2 region and adjacent regions.

XX Internal transcribed spacer 2; ITS2; probe; Aspergillus flavus; A. niger;  
 KW A. terreus; A. nidulans; Fusarium solani; F. moniliforme; Mucor rouxii;  
 KW M. racemosus; M. plumbeus; M. indicus; A. fumigatus;  
 KW M. circinilloides f. circinelloides; Rhizopus oryzae; R. microsporus;  
 KW R. circinans; R. stolonifer; Rhizomucor pusillus; Absidia corymbifera;  
 KW Cunninghamella elegans; Pseudallescheria boydii; Scedosporium apiospermum;  
 KW Penicillium notatum; Sporothrix schenckii; filamentous fungus; PCR primer;  
 KW ss.

XX OS Synthetic.

XX WO9805084-A2.

XX 12-NOV-1998.

XX

PF 01-MAY-1998; 98WO-US0008926.  
 XX  
 PR 02-MAY-1997; 97US-0045400P.  
 XX  
 PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
 XX  
 PI Morrison CJ, Reiss E, Aldorevich L, Choi JS;  
 XX  
 DR WPI; 1999-034737/03.

XX New nucleic acid probes for filamentous fungi - for detecting e.g.  
 PT Aspergillus, Fusarium, Mucor, Rhizopus, Rhizomucor, Absidia,  
 PT Cunninghamella, Pseudallescheria boydii, Penicillium and Sporothrix  
 PT species.  
 XX

PS Example 1; Page 8; 45pp; English.

XX PCR primers AAV70875-76 and AAV83709 were used to amplify internal  
 CC transcribed spacer 2 (ITS2) and adjacent regions of various filamentous  
 CC fungi. Probes can be derived from the amplified sequence (see AAV70845-  
 CC 73) which are species-specific, and can be used for identifying a species  
 CC selected from Aspergillus flavus, A. fumigatus, A. niger, A. terreus, A.  
 CC nidulans, Fusarium solani, F. moniliforme, Mucor rouxii, M. racemosus, M.  
 CC plumbeus, M. indicus, M. circinilloides f. circinelloides, Rhizopus  
 CC oryzae, R. microsporus, R. circinans, R. stolonifer, Rhizomucor pusillus,  
 CC Absidia corymbifera, Cunninghamella elegans, Pseudallescheria boydii  
 CC (teleomorph of Scedosporium apiospermum), Penicillium notatum, or  
 CC Sporothrix schenckii. The probes can be used for differentiating  
 CC filamentous fungal species from each other and from other medically  
 CC important fungi

XX SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTGGTCTCTCGTCGATGC 1567  
 Db 19 CTGCGTCTCTTCATCGATGC 1

RESULT 720  
 AAX26351/C  
 ID AAX26351 standard; DNA; 20 BP.

XX AC AAX26351;

XX  
 DT 27-AUG-2003 (revised)  
 DT 25-MAY-1999 (first entry)

XX DE PCR primer 2S used to amplify DNA encoding a thrombopoietin protein.

XX Cat; thrombopoietin; growth; growth differentiation; megakaryocyte;  
 KW PCR primer; ss.

XX OS Synthetic.  
 OS Felis catus.

XX JP11056368-A.

XX PD 02-MAR-1999.

XX 27-AUG-1997; 97JP-00230911.

XX 27-AUG-1997; 97JP-00230911.

XX (NISK ) NIPPON SEIBUTSU KAGAKU KENKYUSHO ZH.

XX WPI; 1999-222382/19.

XX New gene and protein having of cat thrombopoietin activity - for  
 PT promoting the growth and the growth differentiation of a megakaryocyte.  
 PT



XX  
PS Example 1; Page 4; 13pp; Japanese.  
XX  
CC The present sequence represents a PCR primer used to amplify nucleic acid  
CC encoding a cat protein having thrombopietin activity. The protein  
CC promotes the growth and the growth differentiation of megakaryocytes.  
CC (Updated on 27-AUG-2003 to correct OS field.)  
XX  
SQ Sequence 20 BP; 1 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1626 AGCCCCAGCAGGCGG 1644  
Db 19 AGTCCACAGCAGGCGAG 1

RESULT 721  
AAZ03102/c  
ID AAZ03102 standard; DNA; 20 BP.  
AC AAZ03102;  
XX  
XX 07-OCT-1999 (first entry)  
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.  
XX  
XX Vaccine; eye disease; conventional trachoma; nonendemic trachoma;  
KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;  
KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;  
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.  
XX  
XX Synthetic.  
OS Chlamydia trachomatis.  
XX  
XX WO9928475-A2.  
XX  
XX 10-JUN-1999.  
XX  
XX 27-NOV-1998; 98WO-IB001939.  
XX  
XX 28-NOV-1997; 97FR-00015041.  
PR 17-DEC-1997; 97FR-00016034.  
XX  
XX 04-NOV-1998; 98US-0107077P.  
XX  
XX (GIST ) GENSET.  
XX  
XX Griffais R;  
XX  
XX WPI; 1999-371125/31.  
XX  
XX Genome sequence of Chlamydia trachomatis.  
XX  
XX Disclosure; Page 1579; 1755pp; English.

PCR primers AAZ01426-Z06209 were used to amplify open reading frames (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs encode polypeptides (see AAY36754-Y37949) which can be used as vaccines against Chlamydia trachomatis. Antisense and ribozyme sequences can also be used to control growth of the microorganism. Chlamydia trachomatis is responsible for a large number of diseases, e.g. eye diseases such as conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion conjunctivitis; genital diseases such as nongonococcal urethritis, epididymitis, cervicitis, salpingitis, perihhepatitis, bartholinitis; pneumopathy in breast feeding infants; and venereal lymphogranulomatosis. The polypeptides of the invention may be of use in treating these diseases

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1477 CGATCCCAAACTTCCTG 1495  
Db 20 CGATCCCAAACTTCCTG 2

RESULT 723  
AAZ03873  
ID AAZ03873 standard; DNA; 20 BP.

Query Match 0.8%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 535 AGCCCATCTTTGACAAAGC 553  
Db 19 AGGTCATCTTTGAGAGC 1

RESULT 722  
AAZ05087/c  
ID AAZ05087 standard; DNA; 20 BP.  
XX  
XX AAZ05087;  
AC AAZ05087;  
XX  
XX 07-OCT-1999 (first entry)  
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.  
XX  
XX Vaccine; eye disease; conventional trachoma; nonendemic trachoma;  
KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;  
KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;  
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.  
XX  
XX Synthetic.  
OS Chlamydia trachomatis.  
XX  
XX WO9928475-A2.  
XX  
XX 10-JUN-1999.  
XX  
XX 27-NOV-1998; 98WO-IB001939.  
XX  
XX 28-NOV-1997; 97FR-00015041.  
PR 17-DEC-1997; 97FR-00016034.  
XX  
XX 04-NOV-1998; 98US-0107077P.  
XX  
XX (GIST ) GENSET.  
XX  
XX Griffais R;  
XX  
XX WPI; 1999-371125/31.  
XX  
XX Genome sequence of Chlamydia trachomatis.  
XX  
XX Disclosure; Page 1742; 1755pp; English.

PCR primers AAZ01426-Z06209 were used to amplify open reading frames (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs encode polypeptides (see AAY36754-Y37949) which can be used as vaccines against Chlamydia trachomatis. Antisense and ribozyme sequences can also be used to control growth of the microorganism. Chlamydia trachomatis is responsible for a large number of diseases, e.g. eye diseases such as conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion conjunctivitis; genital diseases such as nongonococcal urethritis, epididymitis, cervicitis, salpingitis, perihhepatitis, bartholinitis; pneumopathy in breast feeding infants; and venereal lymphogranulomatosis. The polypeptides of the invention may be of use in treating these diseases

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1477 CGATCCCAAACTTCCTG 1495  
Db 20 CGATCCCAAACTTCCTG 2

RESULT 723  
AAZ03873  
ID AAZ03873 standard; DNA; 20 BP.

Query Match 0.8%; Score 14.2; DB 1; Length 20;

```

XX AAZ03873;
AC
XX 07-OCT-1999 (first entry)
DT
XX PCR primer used to amplify an ORF of Chlamydia trachomatis.
DE
XX Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;
KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
KW Bartholinitis; pneumonia; venereal lymphogranulomatosis; ss.
XX
OS Synthetic.
OS Chlamydia trachomatis.
XX
XX WO9928475-A2.
XX
XX 10-JUN-1999.
XX
XX 27-NOV-1998; 98WO-IB001939.
XX
XX 28-NOV-1997; 97FR-00015041.
XX
XX 17-DEC-1997; 97FR-00016034.
XX
XX 04-NOV-1998; 98US-0107077P.
XX
XX (GEST ) GENSET.
XX
XX Griffais R;
XX
XX WPI; 1999-371125/31.
XX
XX Genome sequence of Chlamydia trachomatis.
XX
XX Disclosure; Page 1642; 1755pp; English.
XX
XX PCR primers AAZ01426-Z06209 were used to amplify open reading frames
XX (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
XX encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
XX against Chlamydia trachomatis. Antisense and ribozyme sequences can also
XX be used to control growth of the microorganism. Chlamydia trachomatis is
XX responsible for a large number of diseases, e.g. eye diseases such as
XX conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
XX conjunctivitis; genital diseases such as nongonococcal urethritis;
XX epididymitis, cervicitis, salpingitis, perihhepatitis, Bartholinitis;
XX pneumonia in breast feeding infants; and venereal lymphogranulomatosis.
XX The polypeptides of the invention may be of use in treating these
XX diseases
XX
XX Sequence 20 BP; 7 A; 8 C; 2 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1281 GCCAGGATCTGTCCAAAC 1299
XX ||||| ||||| ||||| |||||
XX 1 GCCAGGATCTGTCCAAAC 19
XX
XX RESULT 724
XX AAZ04109
XX ID AAZ04109 standard; DNA; 20 BP.
XX
XX AAZ04109;
XX
XX 07-OCT-1999 (first entry)
XX
XX PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
XX Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;
KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
KW Bartholinitis; pneumonia; venereal lymphogranulomatosis; ss.

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XX OS Synthetic.
XX OS Chlamydia trachomatis.
XX
XX WO9928475-A2.
XX
XX 10-JUN-1999.
XX
XX 27-NOV-1998; 98WO-IB001939.
XX
XX 28-NOV-1997; 97FR-00015041.
XX
XX 17-DEC-1997; 97FR-00016034.
XX
XX 04-NOV-1998; 98US-0107077P.
XX
XX (GEST ) GENSET.
XX
XX Griffais R;
XX
XX WPI; 1999-371125/31.
XX
XX Genome sequence of Chlamydia trachomatis.
XX
XX Disclosure; Page 1661; 1755pp; English.
XX
XX PCR primers AAZ01426-Z06209 were used to amplify open reading frames
XX (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
XX encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
XX against Chlamydia trachomatis. Antisense and ribozyme sequences can also
XX be used to control growth of the microorganism. Chlamydia trachomatis is
XX responsible for a large number of diseases, e.g. eye diseases such as
XX conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
XX conjunctivitis; genital diseases such as nongonococcal urethritis;
XX epididymitis, cervicitis, salpingitis, perihhepatitis, Bartholinitis;
XX pneumonia in breast feeding infants; and venereal lymphogranulomatosis.
XX The polypeptides of the invention may be of use in treating these
XX diseases
XX
XX Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 863 TGAACAGTACCTGCATCA 881
XX ||||| ||||| ||||| |||||
XX 1 TGAACAGTACCTGCATCA 19
XX
XX RESULT 725
XX AAZ06548
XX ID AAZ06548 standard; DNA; 20 BP.
XX
XX AAZ06548;
XX
XX 23-NOV-1999 (first entry)
XX
XX Oligonucleotide primer ITS2.
XX
XX internal transcribed spacer; ITS; ribosomal RNA; fungal pathogen; PCR;
XX primer; detection; plant disease; crop protection; ss.
XX
XX Synthetic.
XX
XX WO9942609-A1.
XX
XX 26-AUG-1999.
XX
XX 18-FEB-1999; 99WO-EP001058.
XX
XX 20-FEB-1998; 98US-00026601.
XX
XX (NOVS ) NOVARTIS AG.
XX (NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.

```

XX Beck JJ;  
XX WPI; 1999-527487/44.  
XX  
XX New internal transcribed spacer DNA from fungal pathogens, used as  
PT sources of primers and probes for pathogen detection.  
XX  
XX Example 6; Page 18; 40pp; English.  
XX  
XX This primer was used to amplify a region of the 5.8S rRNA, the Internal  
CC Transcribed Spacer or ITS sequence. This region is highly conserved  
CC between species. The Internal Transcribed Spacer (ITS) sequences can be  
CC isolated from the ribosomal RNA gene region of fungal pathogens, such as  
CC *Pyrenophora tritici-repentis*. The ITS can then be probed for by a  
CC sequence with at least 10 contiguous nucleotides in homology with the  
CC ITS. This provides a method for detecting fungal pathogens of crops, such  
CC as wheat and maize, the sensitivity of this method allows differentiation  
CC between members of the species or genus  
XX  
XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1549 CTTCGGTCTTCGTCGATGC 1567  
DB 2 CTGCGTCTTCATCGATGC 20  
RESULT 726  
AAZ06549/c  
ID AAZ06549 standard; DNA; 20 BP.  
XX  
XX AAZ06549;  
XX  
XX 23-NOV-1999 (first entry)  
XX  
XX Oligonucleotide primer ITS3.  
XX  
XX internal transcribed spacer; ITS; ribosomal RNA; fungal pathogen; PCR;  
KW primer; detection; plant disease; crop protection; ss.  
XX  
XX Synthetic.  
XX  
XX WO9942609-A1.  
XX  
XX 26-AUG-1999.  
XX  
XX 18-FEB-1999; 99WO-EP001058.  
XX  
XX 20-FEB-1998; 98US-00026601.  
XX  
XX (NOVS ) NOVARTIS AG.  
XX  
XX (NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MEH.  
XX  
XX Beck JJ;  
XX  
XX WPI; 1999-527487/44.  
XX  
XX New internal transcribed spacer DNA from fungal pathogens, used as  
PT sources of primers and probes for pathogen detection.  
XX  
XX Example 6; Page 18; 40pp; English.  
XX  
XX This primer was used to amplify a region of the 5.8S rRNA, the Internal  
CC Transcribed Spacer or ITS sequence. This region is highly conserved  
CC between species. The Internal Transcribed Spacer (ITS) sequences can be  
CC isolated from the ribosomal RNA gene region of fungal pathogens, such as  
CC *Pyrenophora tritici-repentis*. The ITS can then be probed for by a  
CC sequence with at least 10 contiguous nucleotides in homology with the  
CC ITS. This provides a method for detecting fungal pathogens of crops, such  
CC as wheat and maize, the sensitivity of this method allows differentiation  
CC between members of the species or genus  
XX

CC as wheat and maize, the sensitivity of this method allows differentiation  
XX between members of the species or genus  
XX  
XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1549 CTTCGGTCTTCGTCGATGC 1567  
DB 19 CTGCGTCTTCATCGATGC 1  
RESULT 727  
AAZ89549  
ID AAZ89549 standard; cDNA; 20 BP.  
XX  
XX AAZ89549;  
XX  
XX 12-OCT-1999 (first entry)  
XX  
XX PCR primer tprb for amplification of a tpr1 fragment.  
DE  
XX PCR primer tprb; tpr1; TPR; tetratricopeptide repeat-containing protein;  
KW ss.  
XX  
XX Synthetic.  
OS  
XX Homo sapiens.  
XX  
XX US5935851-A.  
XX  
XX 10-AUG-1999.  
XX  
XX 19-JUN-1997; 97US-00879260.  
XX  
XX 20-JUN-1996; 96US-0020204P.  
XX  
XX (GEO ) GEN HOSPITAL CORP.  
XX  
XX Gusella JF, Murthy AE;  
XX  
XX WPI; 1999-457606/38.  
XX  
XX Polypeptides comprising novel tetratricopeptide repeat containing genes.  
XX  
XX Example; Col 28; 34pp; English.  
XX  
XX The sequence is a PCR primer used with primer tprlc (AAZ89550) to amplify  
CC genomic DNA from a human chromosome 5 deletion panel. The primer is based  
CC on positions 810 to 829 of the 3' untranslated region of tpr1 (AAZ89545).  
CC The amplified fragment of tpr1 is used in the construction of plasmid  
CC vectors. tpr1 and tpr2 are novel tetratricopeptide repeat (TPR)-  
CC containing genes. It has been suggested that the product of the tpr1 gene  
CC (AAZ28466) and tpr2 gene (AAZ28487) may be targeted to an abnormality of  
CC protein folding. Although the genes tpr1 and tpr2 both encode TPR  
CC elements they are otherwise unrelated  
XX  
XX Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 281 CTGGGGAACCTTCGTTCTGC 299  
DB 1 CTGGGGAACCTTCGTTCTGC 19  
RESULT 728  
AAZ23562/c  
ID AAZ23562 standard; DNA; 20 BP.  
XX

AC AAX23562;  
XX  
DT 18-JUN-1999 (first entry)  
XX  
DE Deletion sequence oligonucleotide 15.  
XX  
XX Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen;  
KW probe; cellular adhesion modulator; cellular proliferation modulator;  
KW human retrovirus; human immunodeficiency virus; non-human retrovirus;  
KW HIV; primer; ss.  
XX  
OS Synthetic.  
XX  
XX WO9911820-A1.  
PN  
XX  
XX 11-MAR-1999.  
XX  
XX 01-SEP-1998; 98WO-US018084.  
PP  
XX 02-SEP-1997; 97US-00923771.  
PR  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX Chen D, Srivatsa GS;  
PI  
XX WPI; 1999-205198/17.  
DR  
XX  
XX New compositions comprising sensor arrays made up of unique probe  
PT oligonucleotides - useful for characterizing a sample of target deletion  
PT oligonucleotides.  
XX  
XX Example 1; Page 94; 163pp; English.  
XX  
XX This invention describes a novel composition comprising a number of  
CC sensor arrays, where each array comprises a unique probe oligonucleotide,  
CC which is the reverse complement of part of a unique target  
CC oligonucleotide present in a mixture of target deletion sequence  
CC oligonucleotides. The compositions form a method for characterizing a  
CC sample of target deletion oligonucleotides which are labelled and  
CC hybridized with the probe oligonucleotides of the sensor arrays. Such  
CC oligonucleotides and their targets are represented in AAX23548-X23709.  
CC Oligonucleotides characterized by the method form pharmaceutical  
CC compositions that are useful for modulating cellular adhesion or  
CC proliferation, and being active against a eukaryotic pathogen, a human  
CC retrovirus, a human immunodeficiency virus (HIV), or a non-human  
CC retrovirus, including influenza virus, Epstein-Barr virus, Respiratory  
CC Syncytial Virus or cytomegalovirus (CMV). The compositions enable  
CC characterization of deletion sequence oligonucleotides having related,  
CC but different nucleobase sequences, and quantification of different  
CC species of deletion sequence ("target") oligonucleotides in a mixture.  
CC Also, if the specificity of the oligonucleotide's nucleobase sequence for  
CC its reverse complement is not modified, the method may be performed using  
CC oligodeoxynucleotides  
XX  
XX Sequence 20 BP; 0 A; 5 C; 5 G; 10 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 130 CGGATGAGAGAGATCAAC 148  
DB 20 CGCAGAGAGAGAGCAAC 2  
RESULT 729  
AAX96453/c  
ID AAX96453 standard; DNA; 20 BP.  
XX  
XX AAX96453;  
AC  
XX 13-SEP-1999 (first entry)  
DT  
XX

DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.  
XX  
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;  
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;  
KW neutralising epitope; PCR primer; ss.  
XX  
OS Synthetic.  
OS Chlamydia pneumoniae.  
XX  
XX WO9927105-A2.  
PN  
XX 03-JUN-1999.  
PD  
XX 20-NOV-1998; 98WO-IB001890.  
PF  
XX 21-NOV-1997; 97ER-00014673.  
PR 04-NOV-1998; 98US-0107078P.  
XX  
XX (GEST ) GENSET.  
PA  
XX Griffais R;  
PI  
XX WPI; 1999-357842/30.  
DR  
XX Genome sequence of Chlamydia pneumoniae.  
PT  
XX Page 1827; Disclosure; 1912pp; English.  
PS  
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames  
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae  
CC (see AAX91990). C. pneumoniae causes respiratory disease such as  
CC pneumonia and bronchitis and is thought to be a contributing factor in  
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema  
CC nodosum or pharyngitis. The polypeptides encoded by the open reading  
CC frames of the C. pneumoniae genome (see AAX34584-AAX35879) can be used  
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae  
CC nucleotide sequences can also be used as immunogenic compositions,  
CC especially where the vector directs the expression of a neutralising  
CC epitope of C. pneumoniae  
XX  
XX Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 291 TCGTTCTGCACGGGGCCCA 309  
DB 20 TCGTTCTGCACGGGGGACA 2  
RESULT 730  
AAX27102/c  
ID AAX27102 standard; DNA; 20 BP.  
XX  
XX AAX27102;  
AC  
XX 21-MAY-1999 (first entry)  
DT  
XX  
XX Primer for Candida Internal transcribed spacer region 2.  
DE  
XX Internal transcribed spacer region 2; ITS2; probe; Candida detection;  
KW infection; diagnosis; probe; ss.  
XX  
XX Synthetic.  
OS  
XX Candida sp.  
OS  
XX WO9906596-A1.  
PN  
XX 11-FEB-1999.  
PD  
XX 30-JUL-1998; 98WO-US015840.  
DT  
XX

PT 30-JUL-1997; 97US-00903446.  
 XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
 XX Lott TJ, Elie CM, Morrison CJ, Reiss E;  
 XX WPI; 1999-153818/13.  
 XX New nucleic acid probes for *Candida* species - comprises a sequence which  
 PT hybridises with a nucleic acid molecule encoding a portion of the  
 PT internal transcribed spacer 2 region.  
 XX Example 1; Page 12; 59pp; English.  
 XX This sequence is a primer for a *Candida* internal transcribed spacer  
 CC region 2 (ITS2) sequence. The invention relates to a nucleic acid probe  
 CC for a *Candida* species that selectively hybridises with a nucleic acid  
 CC molecule encoding a portion of the ITS2, or a complementary sequence of a  
 CC *Candida* species selected from *Candida guilliermondii*, *C. haemulonii*, *C.*  
 CC *kefyr*, *C. lambica*, *C. lusitanae*, *C. norvegensis*, *C. norvegica*, *C.*  
 CC *rugosa*, *C. utilis*, *C. vismanathii*, *C. zeylanoides*, *C. dubliniensis*, and  
 CC *C. pelliculosa*. The nucleic probes can be used to detect, identify and  
 CC distinguish or differentiate between *Candida* species in a sample or  
 CC specimen with high sensitivity and specificity. The probes can be used to  
 CC detect the presence of *Candida* in the sample, diagnose infection with the  
 CC disease, quantify the amount of *Candida* in the sample, or monitor the  
 CC progress of therapies used to treat the infection. They can also be used  
 CC to study the organisms and related diseases and to guide therapies and  
 CC treatments for the diseases  
 XX  
 XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1549 CTTGCGTCTTCGTCGATGC 1567  
 Db 19 CTTGCGTCTTCGTCGATGC 1  
 RESULT 731  
 AA222586  
 ID AA222586 standard; DNA; 20 BP.  
 XX  
 XX AA222586;  
 XX 13-DEC-1999 (first entry)  
 XX  
 XX PCR primer #2 for amplification of ITS1.  
 XX Internal transcribed region; ITS1; nuclear small subunit; nss; vaccine;  
 XX horse; equine protozoal myeloencephalitis; EPM; diagnosis;  
 XX therapeutic agent; prophylactic agent; parasite; cyst; PCR primer; ss.  
 XX  
 XX Synthetic.  
 XX *Neospora caninum*.  
 XX WO9947927-A1.  
 XX 23-SEP-1999.  
 XX 16-MAR-1999; 99WO-US005754.  
 XX 16-MAR-1998; 98US-00042600.  
 XX (REGC ) UNIV CALIFORNIA.  
 XX Marsh AE, Conrad PA, Barr BC;  
 XX WPI; 1999-571872/48.  
 XX Biologically pure culture of equine *Neospora*, used as source of vaccines

PT and diagnostic reagents.  
 XX Example 3; Page 35; 47pp; English.  
 XX PCR primers AA222585-222586 are used to amplify the internal transcribed  
 CC spacer region (ITS1) of the nuclear small subunit (nss) of *Neospora*  
 CC *caninum* isolates (CN1 and BPA1:AA222584). The invention relates to a  
 CC biologically pure culture of equine *Neospora*, and the PCR product is used  
 CC in the identification of the culture. Immunogens (optionally expressed  
 CC from gene therapy vectors) from equine *Neospora* are used in vaccines for  
 CC the treatment or prevention of *Neospora* infection in horses and other  
 CC animals. *Neospora* is a causative agent of equine protozoal  
 CC myeloencephalitis (EPM). Detection of *Neospora*-specific antigens,  
 CC antibodies or nucleic acid (by usual immunoassay or hybridization tests)  
 CC is used to diagnose infection. Antibodies specific for equine *Neospora*  
 CC are used for diagnosis; to select candidate immunogens for vaccine  
 CC development; to isolate proteins; to screen DNA libraries and as  
 CC therapeutic/prophylactic agents. Reagents specific for equine *Neospora*  
 CC allow differentiation between equine protozoal myeloencephalitis caused  
 CC by *Neospora* and *Sarcocystis neurona*. These pathogens require different  
 CC treatments and treatment of *Neospora* is only effective if applied before  
 CC the parasite has formed cysts. The vaccines also prevent shedding of  
 CC oocysts by animals known to be infected  
 XX  
 XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1549 CTTGCGTCTTCGTCGATGC 1567  
 Db 2 CTTGCGTCTTCGTCGATGC 20  
 RESULT 732  
 AA229421/C  
 ID AA229421 standard; DNA; 20 BP.  
 XX  
 XX AA229421;  
 XX 10-JUN-1999 (first entry)  
 XX  
 XX Rat JNK1-specific oligo ISIS No: 21867.  
 XX Antisense oligonucleotide; Jun N-terminal kinase; JNK; hybridase; JNK1;  
 XX JNK2; JNK3; cell cycle progression; phosphorylation; tumour; probe; rat;  
 XX hyperproliferative; stress-activated protein kinase; p54; SAP; ss.  
 XX  
 XX Synthetic.  
 XX *Rattus norvegicus*.  
 XX WO9909214-A1.  
 XX 25-FEB-1999.  
 XX 07-AUG-1998; 98WO-US016488.  
 XX 13-AUG-1997; 97US-00910629.  
 XX (ISIS-) ISIS PHARM INC.  
 XX McKay R, Dean N, Monia BP, Nero PS, Gaarde WA;  
 XX WPI; 1999-181060/15.  
 XX New antisense oligonucleotides that detect and modulate the expression of  
 PT Jun N-terminal kinase proteins - useful for treating hyperproliferative  
 PT diseases and inhibiting tumor growth in animals, and for modulating  
 PT protein phosphorylation by these proteins.  
 XX  
 XX Example 7; Page 114; 190pp; English.





|            |   |   |
|------------|---|---|
| DE         | XX  | CC92 heavy chain oligonucleotide primer SEQ ID NO:24.                     |
| KW         | KW  | Chimeric antibody; VhalphatAG; TAG-72; human; mouse; diagnosis;           |
| KW         | KW  | tumour-associated sialylated glycoprotein antigen; cytostatic; carcinoma; |
| XX         | XX  | cancer; detection; therapy; primer; ds.                                   |
| OS         | OS  | Homo sapiens.   |
| OS         | OS  | Mus sp.   |
| PN         | US6051225-A.  |   |
| XX         | 18-APR-2000.  |   |
| PD         | XX  |   |
| PF         | 31-MAR-1993;  | 93US-00040687.  |
| PR         | 19-OCT-1988;  | 88US-00259943.  |
| PR         | 24-OCT-1988;  | 88US-00261942.  |
| PR         | 19-OCT-1989;  | 89US-00424362.  |
| XX         | (DOWC ) DOW CHEM CO.  |   |
| PA         | Anderson WHK,   | Schlom J,   |
| XX         | Rixon MW;   | Gourlie BB,   |
| PI         | Mezes PS;   |   |
| XX         | WPI; 2000-349294/30.  |   |
| DR         | Novel family of chimeric antibodies for treating cancer with high         |   |
| XX         | affinities to a high molecular weight tumor-associated sialylated         |   |
| PT         | glycoprotein antigen of human origin.                                     |   |
| PT         | Example; Col 34; 122pp; English.  |   |
| XX         | The present invention describes an antibody (I) produced by one of the    |   |
| CC         | following cell lines: CH44-1 (ATCC HB9884); CH44-2 (ATCC HB9880); CH44-4  |   |
| CC         | (ATCC HB9877); CH88-1 (ATCC HB9882); CH88-2 (ATCC HB9881); CH88-3 (ATCC   |   |
| CC         | HB9876); CH88-4 (ATCC HB9874); CH84-1 (ATCC HB9883); CH84-2 (ATCC HB9879) |   |
| CC         | ; CH84-3 (ATCC HB9878); and CH84-4 (ATCC HB9875), capable of binding to   |   |
| CC         | tumour-associated sialylated glycoprotein (TAG)-72 with an affinity at    |   |
| CC         | least 25% greater than B72.3. (i) can be used for treating and diagnosing |   |
| CC         | cancer, and for the in situ detection of carcinoma lesions and for in     |   |
| CC         | vivo therapy. AAA29682 to AAA29744, and AAY90714 to AAY90723, represent   |   |
| XX         | sequences used in the exemplification of the present invention            |   |
| XX         | Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;                         |   |
| SQ         | Query Match   | 0.8%; Score 14.2; DB 1; Length 20;  |
|            | Best Local Similarity   | 84.2%; Pred. No. 7.3e+02;   |
|            | Matches   | 16; Conservative  |
|            |   | 0; Mismatches   |
|            |   | 3; Indels   |
|            |   | 0; Gaps   |
| Oy         | 1293 GTCCAACGAGGAGTTCGAAG   | 1311  |
| Dd         | 20 GTACATGAGAAGTTCAAG   | 2   |
|            |   |   |
| RESULT 739 |   |   |
| AAA29714/C |   |   |
| ID         | AAA29714 standard; DNA; 20 BP.  |   |
| XX         | AC  | AAA29714;   |
| XX         | DT  | 14-AUG-2000 (first entry)   |
| XX         | VhalphatAG oligonucleotide primer SEQ ID NO:44.                           |   |
| XX         | Chimeric antibody; VhalphatAG; TAG-72; human; mouse; diagnosis;           |   |
| KW         | tumour-associated sialylated glycoprotein antigen; cytostatic; carcinoma; |   |
| KW         | cancer; detection; therapy; primer; ds.                                   |   |
| XX         | Homo sapiens.   |   |
| OS         | Mus sp.   |   |
| XX         | US6051225-A.  |   |
| PN         |   |   |
| XX         | Human genome; biallelic marker; high density disequilibrium map;          |   |
| XX         | genomic map; haplotype; phenotype; polymorphic base; genotyping;          |   |
| KW         | haplotyping; hybridisation; identification; characterisation;             |   |
| KW         | amplification; single nucleotide polymorphism; SNP; PCR primer;           |   |
| XX         | diagnosis; ss.  |   |
| OS         | Homo sapiens.   |   |
| OS         | WO9954500-A2.   |   |
| FN         | 28-OCT-1999.  |   |
| XX         | 21-APR-1999;  | 99WO-TB000822.  |
| XX         | 21-APR-1998;  | 98US-0082614P.  |
| PR         | 23-NOV-1998;  | 98US-0109732P.  |
| PR         | (GEST ) GENSET.   |   |
| XX         | Cohen D, Blumenfeld M, Chumakov I;  |   |
| XX         | WPI; 2000-013267/01.  |   |
| DR         | Novel biallelic markers used to construct a high density disequilibrium   |   |
| PT         | map of the human genome.  |   |
| PT         | Claim 9; Page 1634; 2745pp; English.                                      |   |
| XX         | AAZ65654 to AAZ69578 represent human biallelic markers from the present   |   |
| XX         | invention, which contain a polymorphic base at position 24 of their       |   |
| CC         | nucleotide sequences. AAZ69579 to AAZ77440 represent amplification        |   |
| CC         | primers for the biallelic markers. The biallelic markers of the invention |   |
| CC         | have a variety of uses: they can be used for high density mapping of the  |   |
| CC         | human genome, and in complex association studies and haplotyping studies  |   |
| CC         | which are useful in determining the genetic basis for disease states.     |   |
| CC         | Compositions and methods of the invention can also be useful for the      |   |
| CC         | identification of the targets for the development of pharmaceutical       |   |
| CC         | agents and diagnostic methods, as well as the characterisation of the     |   |
| CC         | differential efficacious responses to and side effects from               |   |
| CC         | pharmaceutical agents acting on a disease as well as other treatment.     |   |
| CC         | N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and    |   |
| CC         | 3367, are not actually given a sequence in the Sequence Listing from the  |   |
| CC         | present invention   |   |
| XX         | Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;                         |   |
| SQ         | Query Match   | 0.8%; Score 14.2; DB 1; Length 20;  |
|            | Best Local Similarity   | 84.2%; Pred. No. 7.3e+02;   |
|            | Matches   | 16; Conservative  |
|            |   | 0; Mismatches   |
|            |   | 3; Indels   |
|            |   | 0; Gaps   |
| Oy         | 807 CATTTATCCACAGGAGG   | 825   |
| Dd         | 2 CTTTATCCACACAGGAG   | 20  |
|            |   |   |
| RESULT 738 |   |   |
| AAA29697/C |   |   |
| ID         | AAA29697 standard; DNA; 20 BP.  |   |
| XX         | AC  | AAA29697;   |
| XX         | DT  | 14-AUG-2000 (first entry)   |
| XX         |   |   |



PD 18-APR-2000.  
XX  
PF 31-VAR-1993; 93US-00040687.  
XX  
PR 19-OCT-1988; 88US-00599943.  
PR 24-OCT-1988; 88US-00261942.  
PR 19-OCT-1989; 89US-00424362.  
XX  
PA (DOWC) DOW CHEM CO.  
XX  
PI Anderson WHK, Kaplan DA, Schlom J, Gourlie BB, Mezes PS;  
PI Rixon NW;  
XX  
DR WPI; 2000-349294/30.  
XX  
XX Novel family of chimeric antibodies for treating cancer with high  
PT affinities to a high molecular weight tumor-associated sialylated  
PT glycoprotein antigen of human origin.  
XX  
XX Example; Col 37; 122pp; English.  
PS  
XX The present invention describes an antibody (I) produced by one of the  
CC following cell lines: CH44-1 (ATCC HB9884); CH44-2 (ATCC HB9880); CH44-4  
CC (ATCC HB9877); CH88-1 (ATCC HB9882); CH88-2 (ATCC HB9881); CH88-3 (ATCC  
CC HB9876); CH88-4 (ATCC HB9874); CH84-1 (ATCC HB9883); CH84-2 (ATCC HB9879)  
CC; CH84-3 (ATCC HB9878); and CH84-4 (ATCC HB9875), capable of binding to  
CC tumour-associated sialylated glycoprotein (TAG)-72 with an affinity at  
CC least 25% greater than B72.3. (I) can be used for treating and diagnosing  
CC cancer, and for the in situ detection of carcinoma lesions and for in  
CC vivo therapy. AAA29682 to AAA29744, and AAY90714 to AAY90723, represent  
CC sequences used in the exemplification of the present invention  
XX  
XX Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1293 GTCCACGAGGAGTTCAG 1311  
DB 20 GTACCAATGAGAGTTCAG 2

RESULT 740  
AAA72056/c  
ID AAA72056 standard; DNA; 20 BP.  
XX  
AC AAA72056;  
XX  
XX 24-NOV-2000 (first entry)  
XX  
XX Japanese citrus viroid 2 gene PCR primer CB2-TM.  
XX  
XX Japanese citrus viroid 2; JCVd2; citrus viroid-I-LSS; detection;  
XX infection; citrus tree; Citrus medica; reverse transcription-PCR;  
XX RT-PCR primer; ss.  
XX  
XX citrus viroid-I-LSS.  
XX  
XX JP2000166567-A.  
XX  
XX 20-JUN-2000.  
XX  
XX 09-DEC-1998; 98JP-00349472.  
XX  
XX 09-DEC-1998; 98JP-00349472.  
XX  
XX (NORQ) NORINSUISANSO KAJU SHIKENBACHO.  
XX  
XX WPI; 2000-492947/44.  
XX  
XX Japanese citrus viroid 2 gene.

PS Example 2; Page 5; 15pp; Japanese.  
XX  
CC The invention relates to a gene (AAA72051) from Japanese citrus viroid 2  
CC (JCVd2, citrus viroid-I-LSS). The invention also encompasses the cDNA  
CC (AAA72052) of this gene, variants of the gene, primers (AAA72053-A72054)  
CC and probes specific for the gene, and a method for the detection of the  
CC gene. The JCVd2 RNA was isolated from the leaves and bark of infected  
CC Citrus medica trees. Probes of the invention may be used to detect  
CC infection by JCVd2, and therefore may be used to provide viroid free  
CC citrus seedlings. Sequences AAA72053-A72057 represent reverse  
CC transcription PCR (RT-PCR) primers for the amplification of the JCVd2  
CC gene or its fragments. Sequences AAA72055 and AAA72056 constitute a  
CC primer set (#2) used in an exemplification of the invention  
XX  
SQ Sequence 20 BP; 3 A; 7 C; 7 G; 3 T; 0 U; 0 Other;  
XX  
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;  
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 502 CCTGAGGGCTACTCGAGA 520  
DB 20 CCTGAGGGCTCTCTCGAGA 2

RESULT 741  
AAC62964/c  
ID AAC62964 standard; DNA; 20 BP.  
XX  
AC AAC62964;  
XX  
XX 06-FEB-2001 (first entry)  
XX  
XX JNK antisense oligonucleotide ISIS #21867.  
XX  
XX Antisense; gene therapy; JNK2 protein; apoptosis; cancer;  
XX cellular hyperproliferation; Alzheimer's; Parkinson's disease;  
XX amyotrophic lateral sclerosis; retinitis; pigmentosa; epilepsy;  
XX myocardial infarction; stroke; obstructive jaundice; polycystic kidney;  
XX diabetes; Jun N-terminal kinase; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO200059549-A1.  
XX  
XX 12-OCT-2000.  
XX  
XX 04-APR-2000; 2000WO-US008880.  
XX  
XX 07-APR-1999; 99US-00287796.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX McKay R, Dean NM, Monia BP, Nero PS, Gaarde WA;  
XX WPI; 2000-638427/61.  
XX  
XX Novel methods for reducing apoptosis comprising contacting cells with  
XX antisense oligonucleotides, useful for treating apoptotic disorders, e.g.  
XX cancer.  
XX  
XX Example 8; Page 150; 160pp; English.  
XX  
XX The present invention relates to antisense oligonucleotides (AAC62844-  
XX C63000, AAA96093-A96099 and AAA07993) that hybridise specifically to a  
XX nucleotide encoding a Jun N-terminal kinase (JNK2) protein, resulting in  
XX decrease of JNK2 expression and leading to induction of apoptosis. The  
XX present sequence is one such antisense oligonucleotide. The  
XX oligonucleotides of the present invention are useful for treating  
XX diseases or conditions with reduced apoptosis, e.g. cancer and cellular  
XX hyperproliferation. The oligonucleotides may also be used to increase the  
XX stimulation of apoptotic proteins, e.g. for treating Alzheimer's or  
XX Parkinson's disease, amyotrophic lateral sclerosis, retinitis,



XX WO200058519-A2.  
XX 05-OCT-2000.  
XX 30-MAR-2000; 2000WO-US008440.  
XX 31-MAR-1999; 99US-0127248P.  
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
XX (AFFY-) AFFYMETRIX INC.  
XX Altschuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;  
XX Lipshutz RJ, Patil N, Sklar P;  
XX WPI; 2000-611722/58.  
XX Nucleic acid selected from one of 106 genes comprising single nucleotide  
PT polymorphisms, allele-specific oligonucleotides to the genes are useful  
PT for phenotypic correlations, forensics, paternity testing, medicine and  
PT genetic analysis.  
XX Claim 8; Fig 5; 214pp; English.  
XX The present invention is concerned with a number of human single  
CC nucleotide polymorphisms (SNPs) which the inventors identified in human  
CC genes. These SNPs can be used in disease diagnosis and prediction of an  
CC individual's susceptibility to disease, in forensic and paternity testing  
CC and in genetic mapping. In particular, the SNPs of the invention can be  
CC used to diagnose susceptibility to diseases of the cardiovascular,  
CC endocrine and neurological systems, such as coronary artery disease,  
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's  
CC diseases  
XX Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;  
PS Query Match 0.8%; Score 14.2; DB 1; Length 20;  
XX Best Local Similarity 84.2%; Pred.No. 7.3e+02;  
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 1449 ACATCCATTCTCTCCTCAGT 1467  
DB 2 ACATCCATACTGCTGAGT 20  
RESULT 745  
AAC72320  
ID AAC72320 standard; DNA; 20 BP.  
XX AC AAC72320;  
XX 09-FEB-2001 (first entry)  
XX Single nucleotide polymorphism PCR primer #1433.  
XX Single nucleotide polymorphism; SNP; human; genetic disease;  
XX disease susceptibility; cardiovascular system; endocrine system;  
XX neurological system; forensic testing; paternity testing; PCR primer; ss.  
XX Homo sapiens.  
XX WO200058519-A2.  
XX 05-OCT-2000.  
XX 30-MAR-2000; 2000WO-US008440.  
XX 31-MAR-1999; 99US-0127248P.  
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
XX (AFFY-) AFFYMETRIX INC.  
XX Altschuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;

PI Lipshutz RJ, Patil N, Sklar P;  
XX WPI; 2000-611722/58.  
XX Nucleic acid selected from one of 106 genes comprising single nucleotide  
PT polymorphisms, allele-specific oligonucleotides to the genes are useful  
PT for phenotypic correlations, forensics, paternity testing, medicine and  
PT genetic analysis.  
XX Claim 8; Fig 5; 214pp; English.  
XX The present invention is concerned with a number of human single  
CC nucleotide polymorphisms (SNPs) which the inventors identified in human  
CC genes. These SNPs can be used in disease diagnosis and prediction of an  
CC individual's susceptibility to disease, in forensic and paternity testing  
CC and in genetic mapping. In particular, the SNPs of the invention can be  
CC used to diagnose susceptibility to diseases of the cardiovascular,  
CC endocrine and neurological systems, such as coronary artery disease,  
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's  
CC diseases  
XX Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;  
PS Query Match 0.8%; Score 14.2; DB 1; Length 20;  
XX Best Local Similarity 84.2%; Pred.No. 7.3e+02;  
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
OY 1449 ACATCCATTCTCTCCTCAGT 1467  
DB 2 ACATCCATACTGCTGAGT 20  
RESULT 746  
AAC72296  
ID AAC72296 standard; DNA; 20 BP.  
XX AC AAC72296;  
XX 09-FEB-2001 (first entry)  
XX Single nucleotide polymorphism PCR primer #1417.  
XX Single nucleotide polymorphism; SNP; human; genetic disease;  
XX disease susceptibility; cardiovascular system; endocrine system;  
XX neurological system; forensic testing; paternity testing; PCR primer; ss.  
XX Homo sapiens.  
XX WO200058519-A2.  
XX 05-OCT-2000.  
XX 30-MAR-2000; 2000WO-US008440.  
XX 31-MAR-1999; 99US-0127248P.  
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
XX (AFFY-) AFFYMETRIX INC.  
XX Altschuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;  
XX Lipshutz RJ, Patil N, Sklar P;  
XX WPI; 2000-611722/58.  
XX Nucleic acid selected from one of 106 genes comprising single nucleotide  
PT polymorphisms, allele-specific oligonucleotides to the genes are useful  
PT for phenotypic correlations, forensics, paternity testing, medicine and  
PT genetic analysis.  
XX Claim 8; Fig 5; 214pp; English.  
XX The present invention is concerned with a number of human single  
CC nucleotide polymorphisms (SNPs) which the inventors identified in human

CC genes. These SNPs can be used in disease diagnosis and prediction of an  
 CC individual's susceptibility to disease, in forensic and paternity testing  
 CC and in genetic mapping. In particular, the SNPs of the invention can be  
 CC used to diagnose susceptibility to diseases of the cardiovascular,  
 CC endocrine and neurological systems, such as coronary artery disease,  
 CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's  
 CC diseases

XX  
 SQ Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1449 ACATCCATCTCTCCTCAGT 1467

DB 2 ACATCCATCTCCTCAGT 20

RESULT 747

AAA90638/C

ID AAA90638 standard; DNA; 20 BP.

XX

AC AAA90638;

XX

DT 03-JAN-2001 (first entry)

XX

DE 3' primer used to amplify rat trkB RNA.

XX

XX Primer; central nervous system; CNS; buoyancy-based separation; rat;

KW dystrophy; trkB; ss.

XX

OS Rattus sp.

XX

PN WO200047718-A1.

XX

PD 17-AUG-2000.

XX

PF 11-FEB-2000; 2000WO-US003596.

XX

PR 11-FEB-1999; 99US-0119642P.

XX

PR 24-SEP-1999; 99US-0158871P.

XX

PA (SALK ) SALK INST BIOLOGICAL STUDIES.

XX

PI Gage FH, Palmer T, Safar FF, Takahashi J, Takahashi M;

XX

DR WPI; 2000-558212/51.

XX

PT Producing adult mammalian central nervous system (CNS)-derived progenitor  
 PT cells or adult mammalian CNS-derived stem cells from adult mammalian CNS  
 PT tissue for the treatment of ophthalmic disorders.

XX

PS Example 5; Page 29; 52pp; English.

XX

CC The present invention relates to a method for obtaining adult mammalian  
 CC central nervous system (CNS)-derived progenitor cells or adult mammalian  
 CC CNS-derived stem cells from a cell population containing adult mammalian  
 CC CNS tissue. The method involves subjecting dissociated mammalian CNS  
 CC tissue to 1 or more buoyancy-based separation systems. The cells may be  
 CC used to repair damaged or diseased tissue in mature mammals, particularly  
 CC neuronal tissue such as retinas, in particular, the method may be used  
 CC for repopulating a retina of a dystrophic animal with neurons by  
 CC injecting CNS cells from a healthy donor. The present sequence is a  
 CC primer used to amplify rat trkB RNA. This was used to assay the  
 CC responsiveness of CNS stem cells when exposed to retinoic acid and a  
 CC variety of neurotrophins

XX Sequence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.8%; Score 14.2; DB 1; Length 20;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 834 CTTGTCTTTTGGTACCTG 852

DB 19 CATGCTCTTTGAGTACATG 1

RESULT 748

AAS03547/C

ID AAS03547 standard; DNA; 20 BP.

XX

AC AAS03547;

XX

DT 29-AUG-2001 (first entry)

XX

DE Mouse immunoglobulin heavy chain sequencing primer B72.3/CC92 HC.

XX

KW Mouse; antibody; TAG-72; mucin; chimaeric heavy chain; B72.3; tumour;  
 KW cancer; radioimmunoguided surgery; sequencing primer; ss; B72.3/CC92 HC.

XX

OS Mus sp.

XX

PN US6207815-B1.

XX

PD 27-MAR-2001.

XX

PF 07-JUN-1995; 95US-00479285.

XX

PR 19-OCT-1988; 88US-00259943.

XX

PR 24-OCT-1988; 88US-00261942.

XX

PR 19-OCT-1989; 89US-00424362.

XX

PR 31-MAR-1993; 93US-00040687.

XX

PA (DOWC ) DOW CHEM CO.

XX

PI Mezes PS, Gourlie BB, Rixon MW, Schlom J, Kaplan DA;

XX

PI Anderson WHK;

XX

DR WPI; 2001-298946/31.

XX

PT Novel DNA sequence encoding chimeric antibody heavy chain or its chimeric  
 PT antigen-binding fragment, useful for cancer treatment, such as in vivo  
 PT diagnostic assays, in vivo therapy and radioimmunoguided surgery.

XX

PS Example; Col 34; 120pp; English.

XX

CC The sequence is a sequencing primer for nucleic acids encoding Mouse  
 CC antibody heavy chains CC92VH and B72.3, which can form chimaeric antibody  
 CC molecules of the invention. The invention concerns chimaeric antibody  
 CC heavy chains or their chimaeric antigen-binding fragment which have the  
 CC ability to combine with anti-TAG-72 antibody light chain to form a  
 CC binding site having an affinity for TAG-72 which is at least 25% greater  
 CC than that of B72.3 (an antibody known to the prior art). TAG-72 is a  
 CC human tumour antigen thought to be a mucin glycoprotein. DNA sequences  
 CC encoding the chimaeric heavy chains are useful for producing antibodies  
 CC that are useful for cancer treatment, such as in vivo diagnostic assays,  
 CC in vivo therapy and radioimmunoguided surgery. The antibodies produce  
 CC significantly fewer side-effects when administered to human patients

XX Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.8%; Score 14.2; DB 1; Length 20;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1293 GTCCAAACGAGGAGTTCAG 1311

DB 20 GTACAATGAGAAGTTCAG 2

RESULT 749

AAH46457/C

ID AAH46457 standard; DNA; 20 BP.

XX

```
AC AAH46457;
XX
XX 14-SEP-2001 (first entry)
XX
XX Oligonucleotide #6.
XX
XX Phosphorothioate; anti-viral therapy; stereochemical pathway;
XX DNA-RNA hybrid; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= b
XX /mod_base= OTHER
XX /note= "All bases are phosphorothioate"
XX modified_base 1
XX /*tag= a
XX /mod_base= OTHER
XX /note= "Modified with 2'-methoxyethyl"
XX misc_RNA 4..6
XX /*tag= c
XX /label= RNA
XX misc_RNA 15..18
XX /*tag= e
XX /label= RNA
XX modified_base 15
XX /*tag= d
XX /mod_base= OTHER
XX /note= "Modified with 2'-methoxyethyl"
XX
XX US6242591-B1.
XX
XX 05-JUN-2001.
XX
XX 11-JAN-2000; 2000US-00481486.
XX
XX 15-OCT-1997; 97US-00950779.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cole DL, Ravikumar VT, Cheruvallath ZS;
XX
XX WPI: 2001-407218/43.
XX
XX Preparing sulfurized 2' substituted phosphorothioate oligonucleotides
XX useful in biological research, comprises phosphorylating the 5'-hydroxyl
XX of a nucleic acid having a nucleoside with a 2' modification.
XX
XX Example 9; Col 6; 7pp; English.
XX
XX The present invention relates to a method for preparing phosphorothioate
XX oligonucleotides having at least one nucleoside with a 2' modification.
XX The method comprises phosphorylating the 5'-hydroxyl of a nucleic acid
XX group having at least one nucleoside with a 2' modification in an
XX acetonitrile. The present sequence was used to illustrate the method of
XX the present invention. The method is useful for synthesizing sulphurised
XX 2' substituted phosphorothioate oligonucleotides, which may be used in
XX molecular biological research, in applications such as anti-viral
XX therapy, and for determining the stereochemical pathways of certain
XX enzymes which recognise nucleic acids
XX
XX Sequence 20 BP; 0 A; 6 C; 4 G; 4 T; 6 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 131 GGATGAAGAGATCAACG 149
XX | | | | | | | | | |
XX 20 GCAGAGAGAGCAACG 2
```

```
RESULT 750
AAH44591/C
ID AAH44591 standard; DNA; 20 BP.
XX
XX AAH44591;
XX
XX 01-NOV-2001 (first entry)
XX
XX Guar and locust bean seed differentiation PCR primer ITS3.
XX
XX Guar gum; locust bean gum; detection; plant; initiator; amplification;
XX PCR; Cyanopsis tetragonoloba; Ceratonia siliqua; thickener;
XX gelling agent; food stabiliser; differentiation; PCR primer; ss.
XX
XX Synthetic.
XX
XX WO200166794-A1.
XX
XX 13-SEP-2001.
XX
XX 02-MAR-2001; 2001WO-ES0000079.
XX
XX 08-MAR-2000; 2000ES-00000560.
XX
XX (CNSJ ) CONSEJO SUPERIOR INVESTIGACIONES CIENTIF.
XX (UYIS-) UNIV LAS ISLAS BALEARES.
XX (UYVA-) UNIV VALENCIA.
XX (CARO-) CAROB SA.
XX
XX Benedi Benito VJ, Domenech Sanchez A, Hernandez Viadel ML;
XX Alberti Serrano S, Rossello Picornell JA;
XX
XX WPI; 2001-565598/63.
XX
XX Differentiating between guar and locust bean seeds, or derived gums, by
XX amplifying specific, characteristic regions of ribosomal DNA.
XX
XX Claim 1; Fig 1; 4pp; Spanish.
XX
XX The present invention describes a method for differentiating between
XX seeds of Cyanopsis tetragonoloba (guar) and Ceratonia siliqua (locust
XX bean) from differences in rDNA extracted from them. The seeds are
XX germinated, DNA extracted and amplified by polymerase chain reaction
XX (PCR) using the rDNA-specific primer pairs ITS5/ITS2 (flanking the ITS
XX (intervening transcribed spacer) 1 region) and ITS3/ITS4 (flanking the
XX ITS2 region). The amplicons are then detected. Also described are: (1)
XX the detection of guar gum, individually or mixed with locust bean gum, by
XX extraction of DNA, amplification by PCR and detecting amplicons
XX corresponding to guar; and (2) extraction of DNA from guar gum and/or
XX locust bean gum. The method is used to differentiate between guar and
XX locust bean seeds (or their derived gums), e.g. to confirm authenticity
XX of guar gum. The gums are used as thickeners, gelling agents and
XX stabilisers in foods. The specified primers provide selective
XX identification of the different seeds. The present sequence represents
XX the ITS5 PCR primer from the present invention
XX
XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1549 CTTCGGTCTTCGTGATGC 1567
XX | | | | | | | | | |
XX 19 CTGGTCTTCATCGATGC 1
XX
XX RESULT 751
AAH44593
ID AAH44593 standard; DNA; 20 BP.
XX
XX AAH44593;
XX
```

DT 01-NOV-2001 (first entry)  
 XX  
 DE Guar and locust bean seed differentiation PCR primer ITS2.  
 XX  
 KW Guar gum; locust bean gum; detection; plant; initiator; amplification;  
 XX PCR; Cyamopsis tetragonoloba; Ceratonia siliqua; thickener;  
 KW gelling agent; food stabiliser; differentiation; PCR primer; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO200166794-A1.  
 XX  
 PD 13-SEP-2001.  
 XX  
 PF 02-MAR-2001; 2001WO-ES0000079.  
 XX  
 XX 08-MAR-2000; 2000ES-00000560.  
 XX  
 PA (CNSJ ) CONSEJO SUPERIOR INVESTIGACIONES CIENTIF.  
 XX (UYIS-) UNIV LAS ISLAS BALEARES.  
 PA (UYVA-) UNIV VALENCIA.  
 PA (CARO-) CAROB SA.  
 XX  
 PI Benedi Benito VJ, Domenech Sanchez A, Hernandez Viadel ML;  
 PI Alberti Serrano SJ, Rosello Picornell JA;  
 XX  
 DR WPI; 2001-565598/63.  
 XX  
 XX Differentiating between guar and locust bean seeds, or derived gums, by  
 PT amplifying specific, characteristic regions of ribosomal DNA.  
 XX  
 PS Claim 1; Fig 1; 44pp; Spanish.  
 XX  
 CC The present invention describes a method for differentiating between  
 CC seeds of Cyamopsis tetragonoloba (guar) and Ceratonia siliqua (locust  
 CC bean) from differences in rDNA extracted from them. The seeds are  
 CC germinated, DNA extracted and amplified by polymerase chain reaction  
 CC (PCR) using the rDNA-specific primer pairs ITS5/ITS2 (flanking the ITS  
 CC intervening transcribed spacer) 1 region) and ITS3/ITS4 (flanking the ITS  
 CC ITS2 region). The amplicons are then detected. Also described are: (1)  
 CC the detection of guar gum, individually or mixed with locust bean gum, by  
 CC extraction of DNA, amplification by PCR and detecting amplicons  
 CC corresponding to guar; and (2) extraction of DNA from guar gum and/or  
 CC locust bean gum. The method is used to differentiate between guar and  
 CC locust bean seeds (or their derived gums), e.g. to confirm authenticity  
 CC of guar gum. The gums are used as thickeners, gelling agents and  
 CC stabilisers in foods. The specified primers provide selective  
 CC identification of the different seeds. The present sequence represents  
 CC the ITS5 PCR primer from the present invention  
 XX  
 SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. NO. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1549 CTTCCGGTCTTCGTCGATGC 1567  
 DB |||||  
 2 CTGCGTCTTCATCGATGC 20  
 RESULT 752  
 AAS08396  
 ID AAS08396 standard; DNA; 20 BP.  
 XX  
 AC AAS08396;  
 XX  
 DT 26-SEP-2001 (first entry)  
 XX  
 DE Internal transcribed spacer, ITS, PCR primer ITS2.  
 XX  
 DE Internal transcribed spacer; ITS; PCR primer; 5.8s rDNA; fungal pathogen;  
 KW wheat disease; Sharp eyespot; fungal pathotype identification; ss; ITS2.  
 XX  
 OS Synthetic.  
 XX  
 PN WO200166794-A1.  
 XX  
 PD 13-SEP-2001.  
 XX  
 PF 02-MAR-2001; 2001WO-ES0000079.  
 XX  
 XX 08-MAR-2000; 2000ES-00000560.  
 XX  
 PA (CNSJ ) CONSEJO SUPERIOR INVESTIGACIONES CIENTIF.  
 XX (UYIS-) UNIV LAS ISLAS BALEARES.  
 PA (UYVA-) UNIV VALENCIA.  
 PA (CARO-) CAROB SA.  
 XX  
 PI Benedi Benito VJ, Domenech Sanchez A, Hernandez Viadel ML;  
 PI Alberti Serrano SJ, Rosello Picornell JA;  
 XX  
 DR WPI; 2001-565598/63.  
 XX  
 XX Differentiating between guar and locust bean seeds, or derived gums, by  
 PT amplifying specific, characteristic regions of ribosomal DNA.  
 XX  
 PS Claim 1; Fig 1; 44pp; Spanish.  
 XX  
 CC The present invention describes a method for differentiating between  
 CC seeds of Cyamopsis tetragonoloba (guar) and Ceratonia siliqua (locust  
 CC bean) from differences in rDNA extracted from them. The seeds are  
 CC germinated, DNA extracted and amplified by polymerase chain reaction  
 CC (PCR) using the rDNA-specific primer pairs ITS5/ITS2 (flanking the ITS  
 CC intervening transcribed spacer) 1 region) and ITS3/ITS4 (flanking the ITS  
 CC ITS2 region). The amplicons are then detected. Also described are: (1)  
 CC the detection of guar gum, individually or mixed with locust bean gum, by  
 CC extraction of DNA, amplification by PCR and detecting amplicons  
 CC corresponding to guar; and (2) extraction of DNA from guar gum and/or  
 CC locust bean gum. The method is used to differentiate between guar and  
 CC locust bean seeds (or their derived gums), e.g. to confirm authenticity  
 CC of guar gum. The gums are used as thickeners, gelling agents and  
 CC stabilisers in foods. The specified primers provide selective  
 CC identification of the different seeds. The present sequence represents  
 CC the ITS5 PCR primer from the present invention  
 XX  
 SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. NO. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1549 CTTCCGGTCTTCGTCGATGC 1567  
 DB |||||  
 2 CTGCGTCTTCATCGATGC 20  
 RESULT 752  
 AAS08396  
 ID AAS08396 standard; DNA; 20 BP.  
 XX  
 AC AAS08396;  
 XX  
 DT 26-SEP-2001 (first entry)  
 XX  
 DE Internal transcribed spacer, ITS, PCR primer ITS2.  
 XX  
 DE Internal transcribed spacer; ITS; PCR primer; 5.8s rDNA; fungal pathogen;  
 KW wheat disease; Sharp eyespot; fungal pathotype identification; ss; ITS2.  
 XX  
 OS Synthetic.  
 XX  
 PN WO200166794-A1.  
 XX  
 PD 13-SEP-2001.  
 XX  
 PF 02-MAR-2001; 2001WO-ES0000079.  
 XX  
 XX 08-MAR-2000; 2000ES-00000560.  
 XX  
 PA (CNSJ ) CONSEJO SUPERIOR INVESTIGACIONES CIENTIF.  
 XX (UYIS-) UNIV LAS ISLAS BALEARES.  
 PA (UYVA-) UNIV VALENCIA.  
 PA (CARO-) CAROB SA.  
 XX  
 PI Benedi Benito VJ, Domenech Sanchez A, Hernandez Viadel ML;  
 PI Alberti Serrano SJ, Rosello Picornell JA;  
 XX  
 DR WPI; 2001-565598/63.  
 XX  
 XX Differentiating between guar and locust bean seeds, or derived gums, by  
 PT amplifying specific, characteristic regions of ribosomal DNA.  
 XX  
 PS Claim 1; Fig 1; 44pp; Spanish.  
 XX  
 CC The present invention describes a method for differentiating between  
 CC seeds of Cyamopsis tetragonoloba (guar) and Ceratonia siliqua (locust  
 CC bean) from differences in rDNA extracted from them. The seeds are  
 CC germinated, DNA extracted and amplified by polymerase chain reaction  
 CC (PCR) using the rDNA-specific primer pairs ITS5/ITS2 (flanking the ITS  
 CC intervening transcribed spacer) 1 region) and ITS3/ITS4 (flanking the ITS  
 CC ITS2 region). The amplicons are then detected. Also described are: (1)  
 CC the detection of guar gum, individually or mixed with locust bean gum, by  
 CC extraction of DNA, amplification by PCR and detecting amplicons  
 CC corresponding to guar; and (2) extraction of DNA from guar gum and/or  
 CC locust bean gum. The method is used to differentiate between guar and  
 CC locust bean seeds (or their derived gums), e.g. to confirm authenticity  
 CC of guar gum. The gums are used as thickeners, gelling agents and  
 CC stabilisers in foods. The specified primers provide selective  
 CC identification of the different seeds. The present sequence represents  
 CC the ITS5 PCR primer from the present invention  
 XX  
 SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. NO. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1549 CTTCCGGTCTTCGTCGATGC 1567  
 DB |||||  
 2 CTGCGTCTTCATCGATGC 20  
 RESULT 753  
 AAS08397/C  
 ID AAS08397 standard; DNA; 20 BP.  
 XX  
 AC AAS08397;  
 XX  
 DT 26-SEP-2001 (first entry)  
 XX  
 DE Internal transcribed spacer, ITS, PCR primer ITS3.  
 XX  
 DE Internal transcribed spacer; ITS; PCR primer; 5.8s rDNA; fungal pathogen;  
 KW wheat disease; Sharp eyespot; fungal pathotype identification; ss; ITS3.  
 XX  
 OS Synthetic.  
 XX  
 PN WO200166794-A1.  
 XX  
 PD 19-JUL-2001.  
 XX  
 PF 09-JAN-2001; 2001WO-EF000172.  
 XX  
 PR 11-JAN-2000; 2000US-00481293.  
 XX  
 PA (SYGN ) SYNGENTA PARTICIPATIONS AG.  
 XX  
 PI Beck JJ, Barnett CJ;  
 PI WPI; 2001-442154/47.  
 XX  
 DE New internal transcribed spacer DNA sequences, useful for identifying

XX  
 OS Synthetic.  
 XX  
 PN WO200151653-A1.  
 XX  
 PD 19-JUL-2001.  
 XX  
 PF 09-JAN-2001; 2001WO-EF000172.  
 XX  
 PR 11-JAN-2000; 2000US-00481293.  
 XX  
 PA (SYGN ) SYNGENTA PARTICIPATIONS AG.  
 XX  
 PI Beck JJ, Barnett CJ;  
 PI WPI; 2001-442154/47.  
 XX  
 DE New internal transcribed spacer DNA sequences, useful for identifying  
 PT fungal pathogen, particularly Rhizoctonia cerealis, and for monitoring  
 PT disease development in plant population.  
 XX  
 PS Example 6; Page 16; 35pp; English.  
 XX  
 CC The sequence is a PCR primer used to amplify the internal transcribed  
 CC spacer (ITS) from the 5.8s rDNA gene of wheat fungal pathogens. The ITS  
 CC DNA sequences are useful for detecting Rhizoctonia cerealis, a fungal  
 CC pathogen of wheat causing Sharp eyespot, for monitoring disease  
 CC development in plant population, and for providing detailed information  
 CC on the development and spread of specific pathogen races over extended  
 CC geographical areas. The DNA sequences are specifically used as primers in  
 CC PCR-based analysis for the identification of fungal pathotypes  
 XX  
 SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. NO. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1549 CTTCCGGTCTTCGTCGATGC 1567  
 DB |||||  
 2 CTGCGTCTTCATCGATGC 20  
 RESULT 753  
 AAS08397/C  
 ID AAS08397 standard; DNA; 20 BP.  
 XX  
 AC AAS08397;  
 XX  
 DT 26-SEP-2001 (first entry)  
 XX  
 DE Internal transcribed spacer, ITS, PCR primer ITS3.  
 XX  
 DE Internal transcribed spacer; ITS; PCR primer; 5.8s rDNA; fungal pathogen;  
 KW wheat disease; Sharp eyespot; fungal pathotype identification; ss; ITS3.  
 XX  
 OS Synthetic.  
 XX  
 PN WO200151653-A1.  
 XX  
 PD 19-JUL-2001.  
 XX  
 PF 09-JAN-2001; 2001WO-EF000172.  
 XX  
 PR 11-JAN-2000; 2000US-00481293.  
 XX  
 PA (SYGN ) SYNGENTA PARTICIPATIONS AG.  
 XX  
 PI Beck JJ, Barnett CJ;  
 PI WPI; 2001-442154/47.  
 XX  
 DE New internal transcribed spacer DNA sequences, useful for identifying

PT fungal pathogen, particularly Rhizoctonia cerealis, and for monitoring  
 PT disease development in plant population.  
 XX Example 6; Page 16; 35pp; English.  
 XX The sequence is a PCR primer used to amplify the internal transcribed  
 CC spacer (ITS) from the 5.8s rDNA gene of wheat fungal pathogens. The ITS  
 CC DNA sequences are useful for detecting Rhizoctonia cerealis, a fungal  
 CC pathogen of wheat causing Sharp eyespot, for monitoring disease  
 CC development in plant population, and for providing detailed information  
 CC on the development and spread of specific pathogen races over extended  
 CC geographical areas. The DNA sequences are specifically used as primers in  
 CC PCR-based analysis for the identification of fungal pathotypes  
 XX  
 SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1549 CTTCGGTCTTCGTCGATGC 1567  
 DB 19 CTTCGGTCTTCGTCGATGC 1  
 RESULT 754  
 ID AAC91160  
 AC AAC91160 standard; DNA; 20 BP.  
 XX  
 XX AAC91160;  
 DT 20-MAR-2001 (first entry)  
 XX  
 XX Universal fungal internal transcribed spacer region primer #3.  
 XX  
 XX Fungal pathogenic; Internal Transcribed Spacer; ITS;  
 KW opportunistic infection; ss.  
 XX  
 XX Unidentified.  
 OS  
 XX WO200073499-A2.  
 PN  
 XX 07-DEC-2000.  
 PD  
 XX 24-MAY-2000; 2000WO-EP004714.  
 PF  
 XX 28-MAY-1999; 99EP-00870109.  
 PR  
 XX 11-JUN-1999; 99US-0138621P.  
 XX  
 XX (INNO-) INNOGENETICS NV.  
 PA (IRBI-) ENTERPRISE IRELAND T/A BIORESEARCH IRELA.  
 XX  
 XX Smith T, Maher M, Martin C, Jannes G, Rossau R, Van Der Weide M;  
 PI  
 XX WPI; 2001-061555/07.  
 DR  
 XX  
 XX Detecting and identifying fungal pathogens, especially Candida,  
 CC Cryptococcus and Aspergillus, comprises hybridizing the amplified nucleic  
 PT acid of the fungal pathogen with a probe from the internal transcribed  
 PT spacer region of a DNA.  
 XX  
 XX Claim 3; Page 49; 59pp; English.  
 PS  
 XX The present invention relates to detecting and identifying fungal  
 CC pathogenic species in a sample. The method involves hybridizing a nucleic  
 CC acid of a fungal pathogen possibly present in the sample with at least  
 CC one oligonucleotide probe, from an internal transcribed spacer (ITS)  
 CC region. The method is useful for simultaneous detection and  
 CC differentiation of clinically important fungi in a single assay,  
 CC particularly Candida albicans, C. parapsilosis, C. tropicalis, C. kefyr,  
 CC C. krusei, C. glabrata, C. dubliniensis, Aspergillus flavus, A.  
 CC versicole, A. nidulans, A. fumigatus, C. neoformans and pneumocystis  
 CC carinii. The method is especially useful in the detection of  
 CC opportunistic infections in patients with impaired immunity systems, such  
 CC as organ transplant patients, patients receiving intensive anticancer  
 CC treatments, diabetics or AIDS patients  
 XX  
 SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

CC opportunistic infections in patients with impaired immunity systems, such  
 CC as organ transplant patients, patients receiving intensive anticancer  
 CC treatments, diabetics or AIDS patients  
 XX  
 SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1549 CTTCGGTCTTCGTCGATGC 1567  
 DB 2 CTTCGGTCTTCGTCGATGC 20  
 RESULT 755  
 AAC91162/c  
 ID AAC91162 standard; DNA; 20 BP.  
 XX  
 XX AAC91162;  
 AC  
 XX 20-MAR-2001 (first entry)  
 DT  
 XX  
 XX Universal fungal internal transcribed spacer region primer #5.  
 XX  
 XX Fungal pathogenic; Internal Transcribed Spacer; ITS;  
 KW opportunistic infection; ss.  
 XX  
 XX Unidentified.  
 OS  
 XX WO200073499-A2.  
 PN  
 XX 07-DEC-2000.  
 PD  
 XX 24-MAY-2000; 2000WO-EP004714.  
 PF  
 XX 28-MAY-1999; 99EP-00870109.  
 PR  
 XX 11-JUN-1999; 99US-0138621P.  
 XX  
 XX (INNO-) INNOGENETICS NV.  
 PA (IRBI-) ENTERPRISE IRELAND T/A BIORESEARCH IRELA.  
 XX  
 XX Smith T, Maher M, Martin C, Jannes G, Rossau R, Van Der Weide M;  
 PI  
 XX WPI; 2001-061555/07.  
 DR  
 XX  
 XX Detecting and identifying fungal pathogens, especially Candida,  
 PT Cryptococcus and Aspergillus, comprises hybridizing the amplified nucleic  
 PT acid of the fungal pathogen with a probe from the internal transcribed  
 PT spacer region of a DNA.  
 XX  
 XX Claim 3; Page 49; 59pp; English.  
 PS  
 XX The present invention relates to detecting and identifying fungal  
 CC pathogenic species in a sample. The method involves hybridizing a nucleic  
 CC acid of a fungal pathogen possibly present in the sample with at least  
 CC one oligonucleotide probe, from an internal transcribed spacer (ITS)  
 CC region. The method is useful for simultaneous detection and  
 CC differentiation of clinically important fungi in a single assay,  
 CC particularly Candida albicans, C. parapsilosis, C. tropicalis, C. kefyr,  
 CC C. krusei, C. glabrata, C. dubliniensis, Aspergillus flavus, A.  
 CC versicole, A. nidulans, A. fumigatus, C. neoformans and pneumocystis  
 CC carinii. The method is especially useful in the detection of  
 CC opportunistic infections in patients with impaired immunity systems, such  
 CC as organ transplant patients, patients receiving intensive anticancer  
 CC treatments, diabetics or AIDS patients  
 XX  
 SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;





Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 993 GAACCTGCTCATCAACGAG 1011  
|||||  
Db 19 GRACCGGGCATCAACGAG 1

RESULT 758  
AAI69777/C  
ID AAI69777 standard; DNA; 20 BP.  
XX AC AAI69777;  
XX DT 13-DEC-2001 (first entry)  
XX DE 16S/23S rRNA spacer region PCR primer #3.  
XX KW Bacterium detection; 16S/23S rRNA spacer region; PCR primer; ss.  
XX OS Pseudomonas putida.  
XX FN JP2001190279-A.  
XX PD 17-JUL-2001.  
XX PF 13-JAN-2000; 2000JP-00004160.  
XX PR 13-JAN-2000; 2000JP-00004160.  
XX PA (MITO ) MITSUBISHI JUKOGYO KK.  
XX DR WPI; 2001-605311/69.  
XX FT Detection method of Pseudomonas bacteria.  
XX FS Claim 9; Page 8; 11pp; Japanese.  
XX CC The present invention relates to a method for the detection of the  
CC 16S/23S rRNA spacer region of Pseudomonas putida (see AAI69774). The  
CC method can be used to detect Pseudomonas bacteria. The present sequence  
CC is a PCR primer which was used in an example from the present invention  
XX SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 48 ACCAGCAGTGACTGCTG 66  
|||||  
Db 20 ACCAGCAGTGAACTGGT 2

RESULT 759  
AAH73769  
ID AAH73769 standard; DNA; 20 BP.  
XX AC AAH73769;  
XX DT 06-AUG-2003 (revised)  
XX DT 08-OCT-2001 (first entry)  
XX DE Guignardia rRNA gene ITS2 reverse PCR primer, SEQ ID NO:6.  
XX KW Ribosomal RNA gene; rRNA gene; internal transcribed spacer; ITS;  
KW pathogenic; non-pathogenic; citrus blackspot disease; citrus fruit;  
KW differentiation; characterisation; detection; PCR primer; ss.  
XX OS Guignardia citricarpa.  
XX OS Guignardia citricarpa.

PN WO200153318-A2.  
XX 26-JUL-2001.  
XX 19-JAN-2001; 2001WO-US001735.  
XX 19-JAN-2000; 2000US-0177013P.  
XX (UYOR-) UNIV OREGON.  
XX Carroll GC;  
XX WPI; 2001-465362/50.  
XX New differentiating oligonucleotides which hybridizes with a target DNA  
XX sequence associated with pathogenic or non-pathogenic species of  
XX Guignardia, for differentiating pathogenic from non-pathogenic species.  
XX Claim 5; Page 18; 33pp; English.

XX The invention relates to oligonucleotide amplification primers and  
XX methods for the detection of pathogenic Guignardia citricarpa. Guignardia  
XX citricarpa is a fungus which causes citrus blackspot disease, producing  
XX progressive black surface lesions on the fruits of most commercial citrus  
XX cultivars such as oranges, lemons, limes, and grapefruit. Although this  
XX is a cosmetic disease, it causes significant losses to the citrus fruit  
XX growing industry, as many countries do not permit the importation of  
XX affected fruit. However, there is a second, non-pathogenic Guignardia  
XX species, Guignardia citricarpa, which also infects citrus fruit, but  
XX which forms insignificant lesions. This non-pathogenic Guignardia species  
XX is morphologically almost indistinguishable from the pathogenic  
XX Guignardia citricarpa, and both species may be simultaneously present on  
XX one fruit. The primers of the invention are targeted to the internal  
XX transcribed spacer (ITS) regions of the ribosomal RNA gene of either the  
XX pathogenic Guignardia citricarpa (see AAH73767) or the non-pathogenic  
XX Guignardia citricarpa (see AAH73768). These regions exhibit significant  
XX differences between the two species, and provides a means by which the  
XX two species may be distinguished from one other. The present sequence  
XX represents a reverse PCR primer which can be used to amplify the rRNA  
XX gene ITS regions of both the pathogenic Guignardia citricarpa and the non  
XX pathogenic Guignardia citricarpa. (Updated on 06-AUG-2003 to correct OS  
XX field.)

SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1549 CTTCCGCTCTCGTCGATGC 1567  
|||||  
Db 2 CTGCGTCTTCATCGATGC 20

RESULT 760  
AAH73770/C  
ID AAH73770 standard; DNA; 20 BP.  
XX AC AAH73770;  
XX DT 06-AUG-2003 (revised)  
XX DT 08-OCT-2001 (first entry)  
XX DE Guignardia citricarpa rRNA gene ITS3 forward PCR primer, SEQ ID:7.  
XX KW Ribosomal RNA gene; rRNA gene; internal transcribed spacer; ITS;  
KW non-pathogenic; citrus blackspot disease; citrus fruit; differentiation;  
KW characterisation; detection; PCR primer; ss.  
XX OS Guignardia citricarpa.  
XX PN WO200153318-A2.  
XX

PD 26-JUL-2001.  
XX  
XX 19-JAN-2001; 2001WO-US001735.  
XX  
XX 19-JAN-2000; 2000US-0177013P.  
XX  
XX (UYOR-) UNIV OREGON.  
XX  
XX Carroll GC;  
XX  
XX WPI; 2001-465362/50.  
XX  
XX New differentiating oligonucleotides which hybridizes with a target DNA  
XX sequence associated with pathogenic or non-pathogenic species of  
XX Guignardia, for differentiating pathogenic from non-pathogenic species.  
XX  
XX Example I; Page 19; 33pp; English.  
XX  
XX The invention relates to oligonucleotide amplification primers and  
XX methods for the detection of pathogenic Guignardia citricarpa. Guignardia  
XX citricarpa is a fungus which causes citrus blackspot disease, producing  
XX progressive black surface lesions on the fruits of most commercial citrus  
XX cultivars such as oranges, lemons, limes, and grapefruit. Although this  
XX is a cosmetic disease, it causes significant losses to the citrus fruit  
XX growing industry, as many countries do not permit the importation of  
XX affected fruit. However, there is a second, non-pathogenic Guignardia  
XX species, Guignardia citricarpa, which also infects citrus fruit, but  
XX which forms insignificant lesions. This non-pathogenic Guignardia species  
XX is morphologically almost indistinguishable from the pathogenic  
XX Guignardia citricarpa, and both species may be simultaneously present on  
XX one fruit. The primers of the invention are targeted to the internal  
XX transcribed spacer (ITS) regions of the ribosomal RNA gene of either the  
XX pathogenic Guignardia citricarpa (see AAH73767) or the non-pathogenic  
XX Guignardia citricarpa (see AAH73768). These regions exhibit significant  
XX differences between the two species, and provides a means by which the  
XX two species may be distinguished from one other. The present sequence  
XX represents a forward PCR primer specific for the rRNA gene ITS region of  
XX the non-pathogenic Guignardia citricarpa. (Updated on 06-AUG-2003 to  
XX correct OS field.)  
XX  
XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1549 CTTCCGCTTCCTCGATGC 1567  
Db 19 CTGCGTTCCTCATCGATGC 1

RESULT 761  
ABN85668/c  
ID ABN85668 standard; DNA; 20 BP.  
XX  
XX ABN85668;  
XX  
XX 13-SEP-2002 (first entry)  
XX  
XX Phytophthora infestans ITS PCR primer ITS3.  
XX  
XX Phytophthora infestans; potato; tomato; infection; ITS;  
XX internal transcribed spacer; PCR; primer; ss.  
XX  
XX Synthetic.  
XX  
XX KR2002000043-A.  
XX  
XX 04-JAN-2002.  
XX  
XX 20-JUN-2000; 2000KR-00033967.  
XX  
XX 20-JUN-2000; 2000KR-00033967.

XX (UYKA-) UNIV KANGWON.  
XX  
XX Kim GS, Lee YS;  
XX  
XX WPI; 2002-441747/47.  
XX  
XX DNA marker for detecting Phytophthora infestans in potato and tomato.  
XX  
XX Disclosure; Fig 1; 9pp; Korean.  
XX  
XX The invention relates to a DNA marker for detecting Phytophthora  
XX infestans in potato and tomato, useful for specifically detecting a small  
XX amount of Phytophthora infestans DNA and diagnosing the infection of  
XX Phytophthora infestans in potato and tomato at any time. The DNA marker  
XX for Phytophthora infestans in potato and tomato is produced by extracting  
XX genomic DNA of Phytophthora species, amplifying the internal transcribed  
XX spacer (ITS) II region using primers ITS3 (ABN85668) and ITS4 (ABN85669),  
XX cloning the amplified products into pGEM-T easy vector, preparing a  
XX primer PISP-1 (ABN85670) and linking the primers PISP-1 and ITS3  
XX  
XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1549 CTTCCGCTTCCTCGATGC 1567  
Db 19 CTGCGTTCCTCATCGATGC 1

RESULT 762  
ABN74847  
ID ABN74847 standard; DNA; 20 BP.  
XX  
XX ABN74847;  
XX  
XX 26-JUL-2002 (first entry)  
XX  
XX Human caspase 2 antisense inhibitor oligonucleotide #26.  
XX  
XX Caspase 2; antisense; cytostatic; osteopathic; cerebroprotective;  
XX neuroprotective; antilipemic; antiinflammatory; antimicrobial;  
XX haematopoietic disorder; bone metabolism disorder; cholesterol disorder;  
XX hyperproliferative disorder; cancer; blood disorder; stroke;  
XX brain injury; neurodegenerative disease; infection; inflammation; tumour;  
XX ss.  
XX  
XX Synthetic.  
XX  
XX Key Location/Qualifiers  
XX modified\_base 1..20  
XX /tag= a  
XX /mod\_base= m5c, OTHER  
XX /note= "Nucleotides 1-5 and 16-20 are five-nucleotide  
XX wings consisting 2'methoxyethyl (2'-MOE) nucleotides, 6-  
XX 15 are 2'deoxy nucleotides, backbone linkages are  
XX phosphodiester, all cytosines are 5-methylcytidines"  
XX  
XX WO200224720-A1.  
XX  
XX 28-MAR-2002.  
XX  
XX 14-SEP-2001; 2001WO-US028631.  
XX  
XX 20-SEP-2000; 2000US-00667018.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Zhang H, Watt AT;  
XX  
XX WPI; 2002-351998/38.

XX New antisense compounds targeted to nucleic acid molecule encoding  
PT caspase 2, useful for treating diseases or conditions associated with  
PT caspase 2, e.g. cancer, blood disorders, stroke, brain injury and  
PT neurodegenerative diseases.  
XX  
PS Claim 3; Page 99; 146pp; English.  
XX  
CC The invention relates to a compound 8-50 nucleobases in length targeted  
CC to a nucleic acid molecule encoding caspase 2, which specifically  
CC hybridizes with and inhibits the expression of caspase 2, or specifically  
CC hybridizes with at least an 8-nucleobase portion of an active site on a  
CC nucleic acid molecule encoding caspase 2. The activity of antisense  
CC oligonucleotides of the invention may be described as, cytostatic,  
CC osteopathic, cerebroprotective, neuroprotective, antilipemic,  
CC antiinflammatory and antimicrobial. The antisense compounds are useful  
CC for treating an animal having a disease or condition associated with  
CC caspase 2, such as haematopoietic disorder, bone metabolism disorder,  
CC cholesterol disorder, or a hyperproliferative disorder. These compounds  
CC may further be used as research reagents and diagnostics, to distinguish  
CC between functions of various members of a biological pathway, to distinguish  
CC treatment of a disease or disorder which can be treated by modulating the  
CC expression of caspase 2, including cancer, blood disorders, stroke, brain  
CC injury and neurodegenerative diseases. They may also be used for  
CC prophylaxis, e.g. to prevent or delay infection, inflammation or tumour  
CC formation. Records ABN74810-ABN74952 represent caspase 2 mRNA inhibitor  
CC oligonucleotides  
XX  
SQ Sequence 20 BP; 5 A; 4 C; 9 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 235 GGTGTGTCGGCAGTGACC 253  
DB 2 GCGCGTGGCAGCGTGAAC 20  
RESULT 763  
ABK99760  
ID ABK99760 standard; DNA; 20 BP.  
XX  
AC ABK99760;  
XX  
DT 21-OCT-2002 (first entry)  
XX  
DE Mouse RAIDD antisense oligonucleotide #14.  
XX  
KW Antisense gene therapy; RAIDD; death domain; caspase recruitment domain;  
KW CARD; hyperproliferative disorder; cancer; growth disorder; mouse;  
KW metabolic disorder; infection; inflammation; tumour formation;  
KW RIP associated ICH-1/CED-3-homologous protein with death domain;  
KW receptor interacting protein; antisense oligonucleotide; ss.  
XX  
OS Mus musculus.  
XX  
FN WO200248314-A2.  
XX  
PD 20-JUN-2002.  
XX  
PF 29-OCT-2001; 2001WO-US050914.  
XX  
PR 01-NOV-2000; 2000US-00705267.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Zhang H, Freier SM, Watt AT;  
XX  
XX WPI; 2002-583496/52.  
XX  
XX Novel antisense compound that hybridizes and inhibits nucleic acid  
PT encoding RAIDD which is an adaptor molecule containing both death domain

PT and caspase recruitment domains, for treating hyperproliferative  
PT disorder.  
XX  
PS Claim 3; Page 94; 144pp; English.  
XX  
CC The invention describes a compound (I) 8-50 nucleobases in length  
CC targeted to a nucleic acid molecule (II) encoding RAIDD which is an  
CC adaptor molecule containing both death domain (DD) and caspase  
CC recruitment domains (CARD), where (I) specifically hybridizes with and  
CC inhibits expression of RAIDD, or specifically hybridizes with at least an  
CC 8-nucleobase portion of an active site on (II). (I) is useful for  
CC inhibiting the expression of RAIDD (Receptor interacting protein (RIP)  
CC associated ICH-1/CED-3-homologous protein with death domain) in cells or  
CC tissues, and for treating an animal having a disease or condition  
CC associated with RAIDD, where the disease or condition is a  
CC hyperproliferative disorder such as cancer, or a growth or metabolic  
CC disorder. (I) is also useful for diagnostics, therapeutics, prophylaxis,  
CC as research reagents and kits, for distinguishing functions of various  
CC members of a biological pathway, and in antisense gene therapy. (I) is  
CC also useful prophylactically, e.g. to prevent or delay infection.  
CC inflammation or tumour formation. This sequence represents a mouse RAIDD  
XX antisense oligonucleotide used to control expression of the RAIDD protein  
SQ Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 36 GTAGGCGAGGAGCCAGCA 54  
DB 1 GAAGGCGAGGATGCCAGCA 19  
RESULT 764  
ABQ75387  
ID ABQ75387 standard; DNA; 20 BP.  
XX  
AC ABQ75387;  
XX  
DT 06-NOV-2002 (first entry)  
XX  
DE Human RNase HII antisense oligonucleotide SEQ ID NO:20.  
XX  
KW RNase H; antisense technology; inhibition; antisense oligonucleotide;  
KW phosphorothioate; ss.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2'-O-methoxyethyl gapmer with an 8 nucleotide  
FT deoxy gap and a phosphorothioate backbone; cytosine  
FT residues are 5-methyl cytosines"  
XX  
FN WO200264841-A1.  
XX  
PD 22-AUG-2002.  
XX  
PF 12-FEB-2002; 2002WO-US004243.  
XX  
PR 12-FEB-2001; 2001US-00781712.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Crooke ST, Lima WF, Wu H;  
XX  
XX WPI; 2002-657606/70.  
XX  
XX Use of a mammalian, particularly human, RNase H, for treating an animal  
PT with a disease or condition associated with a human RNase H, for



## RESULT 767

ABQ93219  
ID ABQ93219 standard; DNA; 20 BP.

XX AC  
XX ABQ93219;

XX 29-AUG-2003 (revised)

XX DT 21-OCT-2002 (first entry)

XX DE T. tauschii/wheat D genome microsatellite cfd226 right PCR primer.

XX Microsatellite marker; wheat; D genome; mapping; genotyping;  
KW polymorphism; phenotypic trait; QTL; quantitative trait locus;  
KW disease-associated gene; development factor; quality factor;  
KW resistance factor; wheat product; identification; detection;  
KW genetically modified wheat; PCR; primer; ss.

OS Aegilops tauschii.

OS Triticum aestivum.

XX EP1217079-A1.

XX 26-JUN-2002.

XX 22-DEC-2000; 2000EP-00403659.

XX 22-DEC-2000; 2000EP-00403659.

XX (INRG ) INRA INST NAT RECH AGRONOMIQUE.

XX Bernard M, Sourdis P, Guyonmarch H;

XX WPI; 2002-550410/59.

XX Map of wheat D genome comprising the genome location of a microsatellite  
PT marker, useful for e.g. identifying genes responsible for a desired  
PT phenotypic trait, especially quantitative trait loci in wheat, and  
PT diseases.

XX Claim 4; Page 8; 105pp; English.

XX The invention relates to a map of the bread wheat D genome comprising the  
CC genome location of a microsatellite marker selected from a group of 185  
CC such markers (ABQ92733-ABQ92917). The invention also encompasses the use  
CC of left (ABQ92918-ABQ93102) and right (ABQ93103-ABQ93287) primers to  
CC amplify and detect the microsatellite markers, and to identify genes  
CC responsible for a phenotypic trait of interest in wheat. Wheat is an  
CC allohexaploid species consisting of 3 diploid genomes designated A, B and  
CC D, resulting from two successive intercrossings involving at least three  
CC different species. The D genome is thought to have been introduced in the  
CC most recent intercrossing, between the amphiploid AABB and Triticum  
CC tauschii (DD), probably involving only a limited number of genotypes of  
CC both species. Due to its polyploid genome, the large size of its genome,  
CC and its low level of polymorphism, the genetic mapping of wheat has to  
CC date been difficult. Microsatellites are tandemly repeated sequences  
CC between one and six nucleotides long, and are very polymorphic in length,  
CC mainly due to polymerase slippage during replication. This high degree of  
CC polymorphism makes them especially suitable for the genetic mapping of  
CC species which show little intraspecific polymorphism, such as wheat. In  
CC addition, microsatellites are codominant, and exhibit Mendelian  
CC inheritance. The 185 microsatellite markers of the invention are  
CC developed from the ancestral diploid donor species Triticum tauschii and  
CC map to the wheat D genome, which is less polymorphic than the A or B  
CC genomes. These microsatellite markers thus help to overcome some of the  
CC problems associated with the genetic mapping of wheat. The wheat D genome  
CC map and the microsatellite markers and associated primers of the  
CC invention are useful for identifying genes responsible for a phenotypic  
CC trait of interest, most notably QTLs (quantitative trait loci). In  
CC particular they may be used for analyzing genes and alleles implicated in  
CC disease and for identifying development factors, quality factors and  
CC factors conferring resistance to pathogens and xenobiotics. The  
CC microsatellite markers, and associated primers may be also be used in

CC mapping and genotyping diploid and polyploid species of Triticum,  
CC particularly Aegilops, Triticum monococcum, Triticum durum, Triticum  
CC aestivum, or related species; for identifying cultivars and hybrids of  
CC Triticum and related species; to assess whether or not a product  
CC comprises wheat or a related species; and to assess whether or not a  
CC product comprises genetically modified wheat. The present sequence  
CC represents a specifically claimed Triticum tauschii/wheat genome D  
CC microsatellite marker right PCR primer of the invention. (Updated on 29-  
CC AUG-2003 to standardise OS field)

XX Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 7.3e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 792 CGTTACGCTACATGACATT 810

Db 2 CGCTATGCTTCATGACATT 20

## RESULT 768

ABA89986

ID ABA89986 standard; DNA; 20 BP.

XX AC

XX ABA89986;

XX 11-FEB-2002 (first entry)

XX Oestrogen receptor alpha gene PCR primer #14.

XX Human; oestrogen receptor alpha; ESR-alpha; ER; chromosome 6; Syme-2;  
KW synaptic nuclei expressed gene 2; haplotype; cytostatic; osteopathic;  
KW cardiant; vasotropic; gene therapy; vaccine; cancer; osteoporosis;  
KW cardiovascular disease; oestrogen receptor; PCR primer; sequencing; ss.

XX Homo sapiens.

XX WO200162969-A2.

XX 30-AUG-2001.

XX 20-FEB-2001; 2001WO-US005358.

XX 22-FEB-2000; 2000US-0183756P.

XX 20-OCT-2000; 2000US-00592414.

XX 24-JAN-2001; 2001US-00768184.

XX (PEKE ) PE CORP NY.

XX Kalush F, Cassel MJ, Hwang SS, Winn-Deen ES;

XX WPI; 2002-041152/05.

XX Novel variant of estrogen receptor alpha polypeptide useful for  
PT determining the biological activity of a protein for high throughput  
PT screening and for raising antibodies that elicit an immune response in  
PT host.

XX Claim 17; Fig 2c; 333pp; English.

XX The present invention describes an isolated peptide (I) consisting of an  
CC amino acid sequence selected from: (a) the amino acid sequence of a  
CC variant of the estrogen receptor alpha (ESR-alpha) protein in ARG68251;  
CC or (b) a fragment comprising at least 10 contiguous amino acids of the  
CC protein in ARG68251. (I) has cytostatic, osteopathic, cardiant and  
CC vasotropic activities, and can be used in gene therapy and vaccine  
CC production. (I) is useful for identifying an agent that binds to (I), by  
CC contacting (I) with an agent and assaying the contacted mixture to  
CC determine whether a complex is formed with the agent bound to the  
CC peptide. A polynucleotide (II), encoding (I), is useful in the  
CC development of diagnostics and therapies for diseases and disorders  
CC mediated/modulated by an estrogen receptor (ER). (II) is also useful in

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CC gene therapy for treating cancer, osteoporosis and cardiovascular
CC diseases. The human ESR-alpha gene is located on chromosome 6. ABA89973
CC to ABA90010 represent PCR primers, and ABA90011 to ABA90037 represent
CC sequencing primers, for the human ESR-alpha gene, which are used in an
CC example from the present invention
XX
SQ Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 826 TCCTCACCCTGCTCTTGG 844
DB 1 TCCACAGCCTGCTCTTGG 19
RESULT 769
AAD39532
ID AAD39532 standard; DNA; 20 BP.
AC AAD39532;
XX
XX 04-OCT-2002 (first entry)
XX Human calreticulin antisense oligonucleotide, ISIS 109325.
XX Human; calreticulin; antisense compound; hyperproliferative disorder;
XX cancer; autoimmune disease; viral infection; cardiovascular disease;
XX antisense therapy; cytosatic; immunosuppressive; virucide; antisense;
XX phosphorothioate backbone; ss.
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20 a
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT modified_base 2
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 2
FT /tag= d
FT /mod_base= m5c
FT modified_base 5
FT /tag= e
FT /mod_base= m5c
FT modified_base 6..20
FT /tag= c
FT /mod_base= OTHER
FT modified_base 7
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 7
FT /tag= f
FT /mod_base= m5c
FT modified_base 10
FT /tag= g
FT /mod_base= m5c
FT modified_base 11
FT /tag= h
FT /mod_base= m5c
FT modified_base 16
FT /tag= i
FT /mod_base= m5c
FT modified_base 17
FT /tag= j
FT /mod_base= m5c
WO200236743-A2.
10-MAY-2002.
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XX 30-OCT-2001; 2001WO-US049045.
XX 30-OCT-2000; 2000US-00702327.
XX (ISIS-) ISIS PHARM INC.
XX Bennett CF, Cowsert LM;
XX WPI; 2002-479759/51.
XX
XX Novel antisense compound targeted to nucleic acid encoding calreticulin,
XX useful for treating a human having disease or condition associated with
XX calreticulin e.g. cancer, viral infection, autoimmune disease.
XX Claim 3; Page 82; 109pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of calreticulin. The compositions comprise
XX antisense compounds, particularly antisense oligonucleotides, targeted
XX to nucleic acids encoding calreticulin. The antisense compound is useful
XX for inhibiting the expression of calreticulin in human cells or tissues.
XX It is also useful for treating a human having a disease or condition
XX associated with calreticulin, e.g., hyperproliferative disorder e.g.
XX cancer, autoimmune disease, viral infection or cardiovascular disease, by
XX inhibiting expression of calreticulin. It is useful for diagnostics,
XX therapeutics, prophylaxis and as research reagents and kits. It is also
XX used in antisense therapy. The present sequence is an antisense compound
XX targeted to human calreticulin. This sequence is used to study the
XX antisense inhibition of calreticulin expression-phosphorothioate 2'-MOE
XX gapmer oligonucleotides
XX
XX Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 928 CAGCTGCTCCGTGGCCTGG 946
DB 2 CAGCTGCTCCGTGGCCTGG 20
RESULT 770
ABL4407
ID ABL44407 standard; DNA; 20 BP.
XX ABL44407;
XX
XX 11-APR-2002 (first entry)
XX Human chromosome 1p36-35 PCR primer SEQ ID NO:1451.
XX Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
XX PCR primer; ss.
XX Homo sapiens.
XX JP2001321190-A.
XX 20-NOV-2001.
XX
XX 12-MAR-2001; 2001JP-00068285.
XX 10-MAR-2000; 2000JP-00066716.
XX (RIKA ) RIKAGAKU KENKYUSHO.
XX (GENO-) GENOTEX YG.
XX WPI; 2002-144136/19.
XX Arraying genome clones.
XX
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PS Claim 4; Page 33; 528pp; Japanese.

XX The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. Of the multiwell plates containing the clones having said marker sequence; (d) the order of the markers is changed so that the same discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. are mixed respectively in each well of longitudinal and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified products; (h) the clones in the multiwell plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL42957 to ABL45322 represent PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention

XX Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1526 TTCAGCTACMAAGAGGCC 1544  
1 TTCAGCTACGTATGGAGCC 19

Db

RESULT 771

ABT05202

ID ABT05202 standard; DNA; 20 BP.

AC ABT05202;

XX 11-OCT-2002 (first entry)

XX TNFR1 expression modulation related antisense oligo SEQ ID No 232.

XX Antisense compound; tumour necrosis factor receptor 1; liver disease;

XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;

XX mouse; murine; ds.

XX Mus sp.

XX WO200248168-A1.

XX 20-JUN-2002.

XX 22-OCT-2001; 2001WO-US051224.

XX 24-OCT-2000; 2000US-00695451.

XX (ISIS-) ISIS PHARM INC.

XX Baker BF, Cowseert LM, Zhang H, Dean NM;  
WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX Example 21; Page 62; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor

CC receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits.

CC This polynucleotide sequence represents a mouse oligonucleotide relating to the TNFR1 of the invention

XX Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1565 TGCTGACTCAGCAGGCC 1583  
1 TGGCTGGCTCAGCGATGCC 19

Db

RESULT 772

ABK27372/c

ID ABK27372 standard; DNA; 20 BP.

XX ABK27372;

AC ABK27372;

XX 09-APR-2002 (first entry)

XX Mutant gamma-aminobutyric acid receptor GABARD subunit PCR primer #15.

DE Human; Anticonvulsant; Tranquilliser; Antimanic; Antidepressant;  
XX Nootropic; Neuroprotective; Neuroleptic; Antimigraine; Anorectic;  
XX gamma-aminobutyric acid receptor subunit; GABA; epilepsy; anxiety;  
XX manic depression; phobic obsessive symptom; Alzheimer's disease;  
XX schizophrenia; migraine; obesity; receptor; primer; ss.

XX Homo sapiens.

XX WO200198486-A1.

XX 27-DEC-2001.

XX 20-JUN-2001; 2001WO-AU000729.

XX 20-JUN-2000; 2000AU-00008260.

XX 13-SEP-2000; 2000AU-00000098.

XX 11-MAY-2001; 2001AU-00004953.

XX (BION-) BIONOMICS LTD.

XX Wallace RH, Mulley JC, Berkovic SF, Harkin LA, Dibbens LM;  
WPI; 2002-122280/16.

XX Mutant gamma-aminobutyric acid receptor subunits and DNA molecule, useful for diagnosing epilepsy, Alzheimer's disease, migraine, obesity, anxiety, manic depression and schizophrenia.

XX Example 5; Page 52; 99pp; English.

XX The invention relates to an isolated mammalian polypeptide (I), which is a mutant of gamma-aminobutyric acid (GABA) receptor subunit. The mutation disrupts the functioning of an assembled GABA receptor, its functional fragment or homologue, and creates a phenotype of epilepsy, anxiety, manic depression, phobic obsessive symptoms, Alzheimer's disease, schizophrenia, migraine and/or obesity. (I), the polynucleotide (II) encoding (I) and antibody (III) to (I) are useful in the diagnosis of epilepsy, anxiety, manic depression, phobic obsessive symptoms, Alzheimer's disease, schizophrenia, migraine and/or obesity. (III) is useful for treating the above conditions. (I)-(III) are useful in screening of candidate pharmaceutical agents, where high-throughput

CC screening techniques are employed. (II) is useful to detect and  
 CC quantitate gene expression in biological samples. Oligonucleotides or  
 CC longer fragments derived from (II) are useful as probes in a microarray  
 CC used to monitor the expression level of large number of genes. (I)-(III)  
 CC are useful for the study of the function of a GABA receptor, to study the  
 CC mechanism of the disease as related to GABA receptor, for the creation of  
 CC explanted mammalian cultures which express a mutant GABA receptor and for  
 CC the evaluation of potential therapeutic interventions. ABK27332-ABK27399  
 CC represent mutant gamma-aminobutyric acid receptor subunit coding  
 CC sequences and PCR primers of the invention  
 XX  
 SQ Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1085 AGGTGGTGACACTGGTGA 1103  
 |||||  
 Db 19 AGGTGGTGCCATTGTCGTA 1

RESULT 773  
 ABA94547  
 ID ABA94547 standard; DNA; 20 BP.

AC ABA94547;

XX 09-APR-2002 (first entry)

DE Mycosphaerella species ribosomal gene-specific primer ITS2.

XX Fungal; pathogen; banana; polymerase chain reaction; Mycosphaerella;  
 KW internal transcribed spacer; ITS; PCR primer; ss.

XX Synthetic.

OS Mycosphaerella sp.

XX WO200196600-A2.

XX 20-DEC-2001.

PF 15-JUN-2001; 2001WO-EP006783.

XX 16-JUN-2000; 2000US-0211902P.

XX (SYGN ) SYNGENTA PARTICIPATIONS AG.

PI Barnett CJ, Beck JJ;

XX WPI; 2002-130742/17.

XX Novel oligonucleotide primer useful for polymerase chain reaction-based  
 PT detection of Mycosphaerella species, a banana fungal pathogen.

XX Example 4; Page 23; 27pp; English.

XX The invention relates to oligonucleotide primers for use in polymerase  
 CC chain reaction (PCR)-based detection of a Mycosphaerella sp., a fungal  
 CC pathogen of banana. The method involves isolating DNA from a plant tissue  
 CC infected with Mycosphaerella sp., amplifying a part of ITS (internal  
 CC transcribed spacer) sequence using the DNA as template in PCR with the  
 CC specified primer pairs and detecting Mycosphaerella sp. by visualizing  
 CC the amplified part of ITS sequence. The primers enable the detection of  
 CC specific isolates of fungal pathogens and the monitoring of disease  
 CC development in plant populations. Sequences ABA94546-549 represent  
 CC ribosomal gene-specific primers synthesised for testing in combination  
 CC with the primers specific for the ITS regions

XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1549 CTTCGGCTTCGTCGATGC 1567  
 |||||  
 Db 2 CTGGCTTCTTCATCGATGC 20

RESULT 774  
 ABA94548/C  
 ID ABA94548 standard; DNA; 20 BP.

XX ABA94548;

XX 09-APR-2002 (first entry)

DE Mycosphaerella species ribosomal gene-specific primer ITS3.

XX Fungal; pathogen; banana; polymerase chain reaction; Mycosphaerella;  
 KW internal transcribed spacer; ITS; PCR primer; ss.

XX Synthetic.

OS Mycosphaerella sp.

XX WO200196600-A2.

XX 20-DEC-2001.

PF 15-JUN-2001; 2001WO-EP006783.

XX 16-JUN-2000; 2000US-0211902P.

XX (SYGN ) SYNGENTA PARTICIPATIONS AG.

PI Barnett CJ, Beck JJ;

XX WPI; 2002-130742/17.

XX Novel oligonucleotide primer useful for polymerase chain reaction-based  
 PT detection of Mycosphaerella species, a banana fungal pathogen.

XX Example 4; Page 23; 27pp; English.

XX The invention relates to oligonucleotide primers for use in polymerase  
 CC chain reaction (PCR)-based detection of a Mycosphaerella sp., a fungal  
 CC pathogen of banana. The method involves isolating DNA from a plant tissue  
 CC infected with Mycosphaerella sp., amplifying a part of ITS (internal  
 CC transcribed spacer) sequence using the DNA as template in PCR with the  
 CC specified primer pairs and detecting Mycosphaerella sp. by visualizing  
 CC the amplified part of ITS sequence. The primers enable the detection of  
 CC specific isolates of fungal pathogens and the monitoring of disease  
 CC development in plant populations. Sequences ABA94546-549 represent  
 CC ribosomal gene-specific primers synthesised for testing in combination  
 CC with the primers specific for the ITS regions

XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGCTTCGTCGATGC 1567  
 |||||  
 Db 19 CTGGCTTCTTCATCGATGC 1

RESULT 775  
 ABV78756/C  
 ID ABV78756 standard; DNA; 20 BP.

XX ABV78756;

XX 14-JAN-2003 (first entry)



DE Cordyceps PCR primer ITS3.  
XX Ribosome ribonucleic acid; rRNA; Cordyceps crassisporea; classification;  
KW Cordyceps sinensis; ss; PCR; primer.  
XX Cordyceps sp.  
OS JP2002204696-A.  
PN 23-JUL-2002.  
PD 12-JAN-2001; 2001JP-00004805.  
PF 12-JAN-2001; 2001JP-00004805.  
PR 12-JAN-2001; 2001JP-00004805.  
XX (HEAL-) HEALTHWAY KK.  
PA (KANE/) KANESHIRO N.  
XX WPI; 2002-639075/69.  
XX Ribosome RNA gene base sequence of Cordyceps sinensis for classification  
PT of seeds of Cordyceps sinensis.  
XX Disclosure; Page 11; 33pp; Japanese.  
XX The invention relates to a novel base sequence which is part of a fully  
CC defined ribosome ribonucleic acid (rRNA) gene of Cordyceps crassisporea.  
CC The base sequences can be used for the classification of Cordyceps  
CC sinensis. The sequence represents a PCR primer used in the invention  
XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Qy 1549 CTTGGCTCTTCGTCGATGC 1567  
Db 19 CTGCGTCTTCATCGATGC 1  
RESULT 776  
ABV78755  
ID ABV78755 standard; DNA; 20 BP.  
XX AC ABV78755;  
XX 14-JAN-2003 (first entry)  
XX Cordyceps PCR primer ITS2.  
XX Ribosome ribonucleic acid; rRNA; Cordyceps crassisporea; classification;  
KW Cordyceps sinensis; ss; PCR; primer.  
XX Cordyceps sp.  
OS JP2002204696-A.  
PN 23-JUL-2002.  
PD 12-JAN-2001; 2001JP-00004805.  
PF 12-JAN-2001; 2001JP-00004805.  
PR (HEAL-) HEALTHWAY KK.  
PA (KANE/) KANESHIRO N.  
XX WPI; 2002-639075/69.  
XX Ribosome RNA gene base sequence of Cordyceps sinensis for classification  
PT of seeds of Cordyceps sinensis.  
XX Disclosure; Page 11; 33pp; Japanese.

XX The invention relates to a novel base sequence which is part of a fully  
CC defined ribosome ribonucleic acid (rRNA) gene of Cordyceps crassisporea.  
CC The base sequences can be used for the classification of Cordyceps  
CC sinensis. The sequence represents a PCR primer used in the invention  
XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Qy 1549 CTTGGCTCTTCGTCGATGC 1567  
Db 2 CTGCGTCTTCATCGATGC 20  
RESULT 777  
AAD34903  
ID AAD34903 standard; DNA; 20 BP.  
XX AC AAD34903;  
XX 16-JUL-2002 (first entry)  
XX Human E2F transcription factor 2 antisense oligo, ISIS #114100.  
XX Human; E2F transcription factor 2; hyperproliferative disorder; cancer;  
KW developmental disorder; antisense; therapy; phosphorothioate backbone;  
KW cytosstatic; ss.  
XX Homo sapiens.  
OS Synthetic.  
XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
FT modified\_base 2  
FT /\*tag= c  
FT /mod\_base= m5c  
FT modified\_base 4  
FT /\*tag= d  
FT /mod\_base= m5c  
FT modified\_base 5  
FT /\*tag= e  
FT /mod\_base= m5c  
FT modified\_base 8  
FT /\*tag= f  
FT /mod\_base= m5c  
FT modified\_base 9  
FT /\*tag= g  
FT /mod\_base= m5c  
FT modified\_base 10  
FT /\*tag= h  
FT /mod\_base= m5c  
FT modified\_base 11  
FT /\*tag= i  
FT /mod\_base= m5c  
FT modified\_base 14  
FT /\*tag= j  
FT /mod\_base= m5c  
FT modified\_base 16..20  
FT /\*tag= k  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
FT modified\_base 20  
FT /\*tag= l

|            |   |                |
|------------|---|----------------|
| FT         |   | /mod_base= m5C |
| XX         | WO200220551-A1.   |                |
| XX         | PN  |                |
| XX         | XX  |                |
| XX         | 14-MAR-2002.  |                |
| XX         | PPD   |                |
| XX         | PPF   |                |
| XX         | 07-SEP-2001; 2001WO-US028202.   |                |
| XX         | PPF   |                |
| XX         | 08-SEP-2000; 2000US-00658679.   |                |
| XX         | PR  |                |
| XX         | (ISIS-) ISIS PHARM INC.   |                |
| XX         | PPA   |                |
| XX         | Popoff I, Wyatt JR;   |                |
| XX         | PFI   |                |
| XX         | DR  |                |
| XX         | WPI; 2002-329864/36.  |                |
| XX         | PS  |                |
| XX         | Claim 3; Page 92; 120pp; English.   |                |
| XX         | PS  |                |
| CC         | The present invention relates to antisense oligonucleotides, compounds    |                |
| CC         | and methods for modulating the expression of E2F transcription factor 2.  |                |
| CC         | The antisense oligonucleotides specifically hybridise with and inhibit    |                |
| CC         | the expression of E2F transcription factor 2. They are useful for         |                |
| CC         | inhibiting the expression of E2F transcription factor 2 and for treating  |                |
| CC         | diseases or conditions associated with E2F transcription factor 2, such   |                |
| CC         | as hyperproliferative disorders, particularly cancer and developmental    |                |
| CC         | disorders. They may also be used as research reagents and diagnostics, to |                |
| CC         | distinguish between functions of various members of a biological pathway  |                |
| CC         | and in the treatment of a disease or disorder which can be treated by     |                |
| CC         | modulating the expression of E2F transcription factor 2. The oligomeric   |                |
| CC         | compounds, particularly the antisense oligonucleotides may be used to     |                |
| CC         | modulate the function of nucleic acid molecules encoding E2F              |                |
| CC         | transcription factor 2, ultimately modulating the amount of E2F           |                |
| CC         | transcription factor produced. Sequences of the invention are also used   |                |
| CC         | in antisense therapy. The present DNA sequence is human E2F transcription |                |
| CC         | factor 2 antisense oligonucleotide with a phosphorothioate backbone. This |                |
| CC         | sequence is targeted to the coding region of human E2F transcription      |                |
| CC         | factor 2  |                |
| XX         |   |                |
| SQ         | Sequence 20 BP; 1 A; 9 C; 5 G; 5 T; 0 U; 0 Other;                         |                |
|            | Query Match 0.8%; Score 14.2; DB 1; Length 20;                            |                |
|            | Best Local Similarity 84.2%; Pred.No. 7.3e+02;                            |                |
|            | Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;               |                |
| QY         | 1387 CTCCTCACCAAGCTGTTCG 1405   |                |
| DB         |   |                |
|            | 2 CTCCTGCCCGACCTGTTCG 20  |                |
| RESULT 778 |   |                |
| AAD38471   |   |                |
| ID         | AAD38471 standard; DNA; 20 BP.  |                |
| AC         | AAD38471;   |                |
| AC         | AAD38471;   |                |
| XX         | 10-SEP-2002 (first entry)   |                |
| XX         | DT  |                |
| DE         | Bovine MHC class I exon 2 amplifying PCR primer, BOC1FP-E2B.              |                |
| XX         |   |                |
| KW         | NHCE-I; immunological rejection; nuclear transfer; NT; immune response;   |                |
| XW         | Bovine-I; major histocompatibility complex; embryo transfer; PCR; primer; |                |
| KW         | MHC class I exon 2 DNA; ss.   |                |
| XX         |   |                |
| OS         | Bos sp.   |                |
| XX         |   |                |
| XX         | WO200229000-A2.   |                |
| PN         |   |                |
| PD         | 11-APR-2002.  |                |

PT expression of TERT, useful for modulating apoptosis and inhibiting cell growth.

XX Claim 26; Page 91; 154pp; English.

XX The invention describes a compound, 8-50 nucleobases in length targeted to a nucleic acid molecule encoding human TERT (telomerase reverse transcriptase), where the compound specifically hybridizes with and inhibits the expression of TERT. A series of oligonucleotides were designed to target different regions of the human TERT RNA. These were 20 nucleotides in length and composed of a central gap region consisting of ten 2'-deoxynucleotides, flanked on both sides (5' and 3' directions) by five-nucleotide wings. The wings were composed of 2'-methoxyethyl (2'-MOE) nucleotides. The compounds were analysed for their effect on human TERT mRNA levels by reverse transcriptase (RT)-polymerase chain reaction (PCR). The compound is useful for inhibiting the expression of TERT in cells or tissues, for treating a human having disease or condition associated with TERT, for modulating apoptosis, for inhibiting cell growth (preferably, cancer cell growth), in antisense therapy and for diagnostics and therapeutics. This sequence is an antisense oligonucleotide used to modulate the activity of nucleic acid molecules encoding TERT, described in the method of the invention

XX Sequence 20 BP; 7 A; 9 C; 2 G; 2 T; 0 U; 0 Other;

XX Query Match 0.8%; Score 14.2; DB 1; Length 20;

XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;

XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 352 GGGTCTGATGGGAGAGTG 370

DB 20 GGGTCTGATGGTGGTACTG 2

RESULT 780

ABI95967/C

ID ABI95967 standard; DNA; 20 BP.

XX AC ABI95967;

XX 16-FEB-2002 (first entry)

XX Capture oligonucleotide Zip ID#3054 oligo #9.

XX Human; K-ras; PCR primer; probe; capture probe; mutation detection; ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.

XX Synthetic.

XX WO200179548-A2.

XX 25-OCT-2001.

XX 04-APR-2001; 2001WO-US010958.

XX 14-APR-2000; 2000US-0197271P.

XX (CORR ) CORNELL RES FOUND INC.

XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;

XX WPI; 2002-034366/04.

XX Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.

XX Example 5; Fig 29; 300pp; English.

XX The present invention describes a method (M1) for designing capture oligonucleotide probes (I) for use on a support to which complementary

CC oligonucleotide probes (II) will hybridise with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus medinensis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects. Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying (using a computer) identified ligation to a sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to ABI97546 represent oligonucleotide sequences used in the exemplification of the present invention

XX Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;

XX Query Match 0.8%; Score 14.2; DB 1; Length 20;

XX Best Local Similarity 84.2%; Pred. No. 7.3e+02;

XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 922 CTGTTCCAGCTGCTCCGTG 940

DB 19 CTGGTCCGGCTACTCCGTG 1

RESULT 781

ABI93287/C

ID ABI93287 standard; DNA; 20 BP.

XX AC ABI93287;

XX 15-FEB-2002 (first entry)

XX Capture oligonucleotide Zip ID#374 oligo #9.

XX Human; K-ras; PCR primer; probe; capture probe; mutation detection; ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.

XX Synthetic.

XX WO200179548-A2.

XX 25-OCT-2001.

XX 04-APR-2001; 2001WO-US010958.

XX 14-APR-2000; 2000US-0197271P.

XX (CORR ) CORNELL RES FOUND INC.

XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;

XX WPI; 2002-034366/04.

XX Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.

XX Example 5; Fig 29; 300pp; English.

XX The present invention describes a method (M1) for designing capture oligonucleotide probes (I) for use on a support to which complementary

oligonucleotide probes (II) will hybridize with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus medinensis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects. Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. AB182074 to CC AB197546 represent oligonucleotide sequences used in the exemplification CC of the present invention XX

SQ Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 999 GTCATCATCAGAGAGGGGA 1017  
|||||  
DB 19 GTCATCATCAGAGAGGGGA 1

RESULT 782  
AB193148/C  
ID AB193148 standard; DNA; 20 BP.  
XX  
AC AB193148;  
XX  
DT 15-FEB-2002 (first entry)  
XX  
DE Capture oligonucleotide Zip ID#235 oligo #9.  
XX  
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;  
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;  
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;  
KW oncogene; tumour suppressor; human papillomavirus; forensic;  
KW environmental monitoring; food industry; feed industry; ss.  
XX  
OS Synthetic.  
XX  
XX WO200179548-A2.  
XX  
XX 25-OCT-2001.  
XX  
XX 04-APR-2001; 2001WO-US010958.  
XX  
XX 14-APR-2000; 2000US-0197271P.  
XX  
XX (CORR ) CORNELL RES FOUND INC.  
XX  
XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;  
XX  
XX WPI; 2002-034366/04.  
XX

Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.  
XX  
XX Example 5; Fig 29; 30pp; English.

The present invention describes a method (M1) for designing capture oligonucleotide probes (I) for use on a support to which complementary

oligonucleotide probes (II) will hybridize with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus medinensis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects. Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. AB182074 to CC AB197546 represent oligonucleotide sequences used in the exemplification CC of the present invention XX

SQ Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1121 TGCTTGGTTCACGGACTA 1139  
|||||  
DB 19 TGCTTGGTTCACGGACGA 1

RESULT 783  
ABQ87695  
ID ABQ87695 standard; DNA; 20 BP.  
XX  
AC ABQ87695;  
XX  
DT 18-SEP-2002 (first entry)  
XX  
DE Human ESR1 exon 1G reverse PCR primer.  
XX  
KW Human; oestrogen; receptor; oestrogen receptor alpha; cytostatic;  
KW osteopathic; cardiant; cancer; osteoporosis; cardiovascular disorder;  
KW ESR-alpha; ESR1; PCR; primer; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200234945-A2.  
XX  
XX 02-MAY-2002.  
XX  
XX 21-AUG-2001; 2001WO-US025990.  
XX  
XX 20-OCT-2000; 2000US-00692414.  
XX  
XX 24-JAN-2001; 2001US-00768184.  
XX  
XX 13-MAR-2001; 2001US-00804076.  
XX  
XX 05-APR-2001; 2001US-00826314.  
XX  
XX (APPL-) APPLERA CORP.  
XX  
XX Kalush F, Casel MJ, Hwang SS, Winn-deen ES;  
XX  
XX WPI; 2002-479722/51.  
XX  
XX  
XX Peptide of estrogen receptor alpha genes variant or its fragment for use in identifying modulators for treating disorders e.g. a susceptibility to cancer, osteoporosis, cardiovascular disorder.  
XX  
XX Example 1; Fig 2D; 352pp; English.

CC The invention relates to novel human oestrogen receptor variant peptides,  
 CC and the polynucleotides encoding them. The peptides of the invention have  
 CC cytotatic, osteoporotic and cardiac activity. The peptides of the  
 CC invention are useful to mediate or modulate a variety of disorders such  
 CC as a susceptibility to cancer, osteoporosis, cardiovascular disorder,  
 CC etc, and hence are useful in the treatment of the disorders. The  
 CC sequences shown in AB097682-AB097719 represent PCR primers used in the  
 CC invention to amplify individual exons of the human oestrogen receptor  
 CC alpha (ESR-alpha or ESR1) gene

XX SQ Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 826 TCCCTCACCCCTGCTTTG 844  
 ||||| ||||| ||||| |||||  
 Db 1 TCCACACGCTTGTCTTGG 19

RESULT 784  
 ABZ93135  
 ID ABZ93135 standard; DNA; 20 BP.  
 AC ABZ93135;  
 XX  
 DT 17-OCT-2003 (first entry)  
 XX  
 DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.  
 OS  
 XX WO200285308-A2.  
 PN  
 XX 31-OCT-2002.  
 PD  
 XX 23-APR-2002; 2002WO-US013135.  
 PF  
 XX 24-APR-2001; 2001US-0286137P.  
 PR  
 XX (EPIG-) EPIGENESIS PHARM INC.  
 PA  
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 PI  
 XX WPI; 2003-229219/22.  
 DR  
 XX Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.  
 PT  
 XX Disclosure; SEQ ID NO 8377; 872bp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1521 GGAGATTACGCTACAAAG 1539  
 ||||| ||||| ||||| |||||  
 Db 1 GGAATTACCTTCAAAAG 19

RESULT 785  
 ABZ85058/C  
 ID ABZ85058 standard; DNA; 20 BP.  
 AC ABZ85058;  
 XX  
 DT 17-OCT-2003 (first entry)  
 XX  
 DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.  
 OS  
 XX WO200285308-A2.  
 PN  
 XX 31-OCT-2002.  
 PD  
 XX 23-APR-2002; 2002WO-US013135.  
 PF  
 XX 24-APR-2001; 2001US-0286137P.  
 PR  
 XX (EPIG-) EPIGENESIS PHARM INC.  
 PA  
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 PI  
 XX WPI; 2003-229219/22.  
 DR  
 XX Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.  
 PT  
 XX Claim 15; SEQ ID NO 300; 872bp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 2 A; 4 C; 7 G; 7 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 623 AGCTGACAACTGGCGGA 641  
Db 19 ACTGAACAACTGGCGGA 1  
  
RESULT 786  
ABZ85420/c  
ID ABZ85420 standard; DNA; 20 BP.  
XX AC ABZ85420;  
XX DT 17-OCT-2003 (first entry)  
XX DE Human oligonucleotide sequence.  
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX OS Homo sapiens.  
XX PN WO200285308-A2.  
XX PD 31-OCT-2002.  
XX PF 23-APR-2002; 2002WO-US013135.  
XX PR 24-APR-2001; 2001US-0286137P.  
XX PA (EPIG-) EPIGENESIS PHARM INC.  
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Claim 15; SEQ ID NO 662; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 4 A; 7 C; 8 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 1029 GGCTGACCTTGGCTGGCC 1047  
Db 19 GGCTGACCTTGGCTGGCC 1  
  
RESULT 787  
ABZ85267/c  
ID ABZ85267 standard; DNA; 20 BP.  
XX AC ABZ85267;  
XX DT 17-OCT-2003 (first entry)  
XX DE Human oligonucleotide sequence.  
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX OS Homo sapiens.  
XX PN WO200285308-A2.  
XX PD 31-OCT-2002.  
XX PF 23-APR-2002; 2002WO-US013135.  
XX PR 24-APR-2001; 2001US-0286137P.  
XX PA (EPIG-) EPIGENESIS PHARM INC.  
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Claim 15; SEQ ID NO 509; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1403 TGCAGTTGAGGGTCGAAA 1421  
 |||||  
 DB 19 TGCAGTTGAGGGCGCAAA 1

#### RESULT 788

ABZ84777/C  
 ID ABZ84777 standard; DNA; 20 BP.

XX AC ABZ84777;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.

XX PS Claim 15; SEQ ID NO 19; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 993 GAACCTGCTCATCAAGAG 1011  
 |||||  
 DB 19 GAACCTGCTCATCTCCAAG 1

#### RESULT 789

ABZ87947

ID ABZ87947 standard; DNA; 20 BP.

XX AC ABZ87947;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.

XX PS Disclosure; SEQ ID NO 3189; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also



CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 10 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1008 CGAGGGGAGAGCTCAAG 1026  
DB 1 CGAGGAGAGAGATCAAG 19

RESULT 790  
ABZ87022/c  
ID ABZ87022 standard; DNA; 20 BP.  
XX  
AC ABZ87022;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200295308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX

Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Claim 15; SEQ ID NO 2264; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 7 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1394 CCAGCTGTCAGTTTGA 1412  
DB 19 CCAGCTGATGTACTTTGA 1

RESULT 791  
ABZ88149/c  
ID ABZ88149 standard; DNA; 20 BP.  
XX  
AC ABZ88149;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200295308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX

Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 3391; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also



CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 3 A; 3 C; 8 G; 6 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 994 AACCTGCTCATCAGAGA 1012  
DB 19 ACCCTGCTCATCAGAGA 1  
RESULT 792  
ABZ87509/C  
ID ABZ87509 standard; DNA; 20 BP.  
XX AC ABZ87509;  
XX DT 17-OCT-2003 (first entry)  
XX DE Human oligonucleotide sequence.  
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;  
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
XX lung inflammation; respiratory disease; ds.  
XX OS Homo sapiens.  
XX PN WO200285308-A2.  
XX PD 31-OCT-2002.  
XX PF 23-APR-2002; 2002WO-US013135.  
XX PR 24-APR-2001; 2001US-0286137P.  
XX PA (EPIG-) EPIGENESIS PHARM INC.  
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX WPI; 2003-229219/22.  
XX PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX PS Disclosure; SEQ ID NO 2751; 872pp; English.  
XX CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 2 A; 6 C; 2 G; 10 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 715 CTGGAACATGAAGAGGGG 733  
DB 20 CTGGAACATGAAGAAAGAG 2  
RESULT 793  
ABV77015/C  
ID ABV77015 standard; DNA; 20 BP.  
XX AC ABV77015;  
XX DT 03-MAR-2003 (first entry)  
XX DE Primer ITS3 used to amplify fungal nuclear rDNA ITS region.  
XX KW Internal transcribed spacer region; ITS region; fungal pathogen;  
XX Colletotrichum acutatum; Alternaria; Cladosporium carpophilum; PCR;  
XX primer; ss.  
XX OS Synthetic.  
XX PN WO200277293-A2.  
XX PD 03-OCT-2002.  
XX PF 08-MAR-2002; 2002WO-EP002581.  
XX PR 09-MAR-2001; 2001US-0274540P.  
XX PR 24-AUG-2001; 2001US-00939379.  
XX PA (SYGN ) SYNGENTA PARTICIPATIONS AG.  
XX PI Beck JJ, Barnett CJ, Perry CV;  
XX WPI; 2003-092859/08.  
XX PT New internal transcribed spacer-derived oligonucleotide primer useful for  
PT detecting fungal pathogens such as Colletotrichum acutatum, Alternaria  
PT spp. or Cladosporium carpophilum.  
XX PS Example 6; Page 20; 51pp; English.  
XX CC PCR primers ABV77013-16 represent conserved primers designed for  
CC amplification of the fungal nuclear ribosomal RNA internal transcribed  
CC spacer (ITS) region. The primers are useful for detecting a fungal  
CC pathogen such as Colletotrichum acutatum, Alternaria spp. or Cladosporium  
CC carpophilum. The primers are useful for detecting specific isolates of  
CC fungal pathogens and for monitoring disease development in plant  
CC populations, for assessing potential damage in a specific crop  
CC on the development and spread of specific pathogen races over extended  
CC variety/pathogen strain relationship, for providing detailed information  
CC geographical areas, and for detecting diseases with long latent phase  
XX  
SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567  
 Db 19 CTGCGTCTTCATCGATGC 1

RESULT 794  
 ABV77014  
 ID ABV77014 standard; DNA; 20 BP.  
 XX  
 AC ABV77014;  
 XX  
 DT 03-MAR-2003 (first entry)  
 XX  
 DE Primer ITS2 used to amplify fungal nuclear rDNA ITS region.  
 XX  
 KW Internal transcribed spacer region; ITS region; fungal pathogen;  
 KW Colletotrichum acutatum; Alternaria; Cladosporium carpophilum; PCR;  
 KW primer; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX WO20027293-A2.  
 PN  
 XX 03-OCT-2002.  
 PD  
 XX 08-MAR-2002; 2002WO-EP002581.  
 PF  
 XX 09-MAR-2001; 2001US-0274540P.  
 PR  
 XX 24-AUG-2001; 2001US-00939379.  
 XX  
 PA (SYGN) SYNGENTA PARTICIPATIONS AG.  
 XX  
 XX Beck JJ, Barnett CJ, Perry CV;  
 PI  
 XX WPI; 2003-092859/08.  
 DR  
 XX New internal transcribed spacer-derived oligonucleotide primer useful for  
 PT detecting fungal pathogens such as Colletotrichum acutatum, Alternaria  
 PT spp. or Cladosporium carpophilum.  
 PT  
 XX  
 PS Example 6; Page 20; 51pp; English.

PCR primers ABV77013-16 represent conserved primers designed for  
 CC amplification of the fungal nuclear ribosomal RNA internal transcribed  
 CC spacer (ITS) region. The primers are useful for detecting a fungal  
 CC pathogen such as Colletotrichum acutatum, Alternaria spp. or Cladosporium  
 CC carpophilum. The primers are useful for detecting specific isolates of  
 CC fungal pathogens and for monitoring disease development in plant  
 CC populations, for assessing potential damage in a specific crop  
 CC variety/pathogen strain relationship, for providing detailed information  
 CC on the development and spread of specific pathogen races over extended  
 CC geographical areas, and for detecting diseases with long latent phase  
 XX

Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567  
 Db 2 CTGCGTCTTCATCGATGC 20

RESULT 795  
 ACA61050  
 ID ACA61050 standard; DNA; 20 BP.  
 XX  
 AC ACA61050;  
 XX  
 DT 14-JUL-2003 (first entry)  
 XX

XX Guignardia internal transcribed spacer (ITS) reverse primer #2.  
 DE  
 XX Guignardia; pathogen; internal transcribed spacer; ITS; citrus fruit;  
 KW intergenic sequence; intronic sequence; calmodulin; chitin synthase;  
 KW citrus blackspot; PCR; primer; ss.  
 XX  
 OS Guignardia sp.  
 XX  
 PN WO2003031933-A2.  
 XX  
 PD 17-APR-2003.  
 XX  
 XX 09-OCT-2002; 2002WO-US032227.  
 PF  
 XX 09-OCT-2001; 2001US-0327982P.  
 PR  
 XX (UYOR-) UNIV OREGON.  
 PA  
 XX Carroll GC;  
 PI  
 XX WPI; 2003-372133/35.  
 DR  
 XX Differentiating pathogenic and non-pathogenic Guignardia sp., by  
 PT assessing hybridization between DNA from Guignardia- infected citrus and  
 PT probes based on intronic sequences from calmodulin and chitin synthase  
 PT genes.  
 PT  
 XX Example 1; Page 19; 37pp; English.

The invention describes a method of differentiating pathogenic and non-  
 CC pathogenic species of Guignardia (I). The method comprises obtaining a  
 CC DNA sample from a citrus fruit infected with (I), immobilising the DNA,  
 CC probing the immobilised DNA with a probe based on intergenic sequences  
 CC and intronic sequences from within the calmodulin and chitin synthase  
 CC genes, and demonstrating hybridisation with the probes to represent the  
 CC pathogenic species and non-pathogenic species. The method is specific,  
 CC rapid and useful for differentiating pathogenic species (e.g. Guignardia  
 CC citricarpa, the causative agent of citrus blackspot) from non-pathogenic  
 CC species of Guignardia. This sequence represents a primer used to isolate  
 CC an internal transcribed spacer to allow characterisation of pathogenic  
 CC Guignardia  
 CC

Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGTCGATGC 1567  
 Db 2 CTGCGTCTTCATCGATGC 20

RESULT 796  
 ACA61051/C  
 ID ACA61051 standard; DNA; 20 BP.  
 XX  
 AC ACA61051;  
 XX  
 DT 14-JUL-2003 (first entry)  
 XX  
 DE Guignardia internal transcribed spacer (ITS) forward primer #3.  
 XX  
 KW Guignardia; pathogen; internal transcribed spacer; ITS; citrus fruit;  
 KW intergenic sequence; intronic sequence; calmodulin; chitin synthase;  
 KW citrus blackspot; PCR; primer; ss.  
 XX  
 OS Guignardia sp.  
 XX  
 PN WO2003031933-A2.  
 XX  
 DT 17-APR-2003.

XX 09-OCT-2002; 2002WO-US032227.  
XX PA (KHAL/) LIVETT B.  
XX PA (KHAL/) KHALIL Z.  
XX PA (GAYL/) GAYLER K.  
XX PA (DOWN/) DOWN J.  
XX PI Livett B, Khalil Z, Gayler K, Down J;  
XX WPI; 2003-103260/09.  
XX DR WPI; 2003-372133/35.  
XX PT New alpha- conotoxin-like peptides that inhibit the activity of neuronal  
XX PT nicotinic acetylcholine receptor, useful for treating stroke, pain,  
XX PT schizophrenia, Parkinson's disease, small cell lung carcinoma or  
XX PT Alzheimer's disease.  
XX PS Claim 18; Page 31; 87pp; English.  
XX CC The invention relates to an isolated alpha-conotoxin-like peptide  
XX CC sequence. The activity of peptides of the invention may be described as  
XX CC cerebroprotective, analgesic, anticonvulsant, neuroleptic,  
XX CC antiparkinsonian, cytosstatic, nootropic and neuroprotective. Peptides of  
XX CC the invention are neuronal nicotinic acetylcholine receptor (nAChR)  
XX CC inhibitors. The alpha-conotoxin-like peptide is useful for treating a  
XX CC condition mediated by a neuronal nicotinic acetylcholine receptor, e.g.  
XX CC stroke, pain (e.g. cancer related pain, post-surgical pain, oral or  
XX CC dental pain, referred trigeminal neuralgia, post-herpetic neuralgia,  
XX CC phantom limb pain, fibromyalgia, reflex sympathetic dystrophy, pain  
XX CC associated with inflammatory conditions, rheumatoid arthritis or  
XX CC inflammatory arthritis, or pain resulting from conditions associated with  
XX CC neurogenic or neuropathic pain), epilepsy, nicotine addiction, or  
XX CC schizophrenia. Parkinson's disease, small cell lung carcinoma, or  
XX CC Alzheimer's disease. The alpha-conotoxin-like peptide is also useful for  
XX CC accelerating recovery from nerve injury. The peptides are also useful as  
XX CC research reagents for investigating nicotinic acetylcholine receptor  
XX CC physiology and pharmacology. The current sequence represents a PCR primer  
XX CC for the isolation of peptide Vcl.1  
XX SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1549 CTCGGCTCTTCGTCATGC 1567  
DB 19 CTCGGCTCTTCGTCATGC 1  
RESULT 797  
ID AB221316/c  
XX ID AB221316 standard; DNA; 20 BP.  
XX AC AB221316;  
XX DT 24-FEB-2003 (first entry)  
XX DE PCR primer for the isolation of peptide Vcl.1 #SEQ ID 5.  
XX KW Alpha-conotoxin; cerebroprotective; analgesic; anticonvulsant;  
XX KW neuroleptic; antiparkinsonian; cytosstatic; nootropic; neuroprotective;  
XX KW neuronal nicotinic acetylcholine receptor; nAChR; inhibitor; stroke;  
XX KW pain; cancer related pain; post-surgical pain; oral pain;  
XX KW referred trigeminal neuralgia; post-herpetic neuralgia;  
XX KW phantom limb pain; fibromyalgia; reflex sympathetic dystrophy;  
XX KW rheumatoid arthritis; inflammatory arthritis; neurogenic pain;  
XX KW neuropathic pain; epilepsy; nicotine addiction; schizophrenia;  
XX KW Parkinson's disease; small cell lung carcinoma; Alzheimer's disease;  
XX KW nerve injury; PCR; primer; ss.  
XX OS Conus victoriae.  
XX PN WO200279236-A1.  
XX PD 10-OCT-2002.  
XX PF 28-MAR-2002; 2002WO-AU000411.  
XX PR 29-MAR-2001; 2001AU-00004094.  
XX

PA (LIVE/) LIVETT B.  
PA (KHAL/) KHALIL Z.  
PA (GAYL/) GAYLER K.  
PA (DOWN/) DOWN J.  
XX PI Livett B, Khalil Z, Gayler K, Down J;  
XX WPI; 2003-103260/09.  
XX DR WPI; 2003-372133/35.  
XX PT New alpha- conotoxin-like peptides that inhibit the activity of neuronal  
XX PT nicotinic acetylcholine receptor, useful for treating stroke, pain,  
XX PT schizophrenia, Parkinson's disease, small cell lung carcinoma or  
XX PT Alzheimer's disease.  
XX PS Claim 18; Page 31; 87pp; English.  
XX CC The invention relates to an isolated alpha-conotoxin-like peptide  
XX CC sequence. The activity of peptides of the invention may be described as  
XX CC cerebroprotective, analgesic, anticonvulsant, neuroleptic,  
XX CC antiparkinsonian, cytosstatic, nootropic and neuroprotective. Peptides of  
XX CC the invention are neuronal nicotinic acetylcholine receptor (nAChR)  
XX CC inhibitors. The alpha-conotoxin-like peptide is useful for treating a  
XX CC condition mediated by a neuronal nicotinic acetylcholine receptor, e.g.  
XX CC stroke, pain (e.g. cancer related pain, post-surgical pain, oral or  
XX CC dental pain, referred trigeminal neuralgia, post-herpetic neuralgia,  
XX CC phantom limb pain, fibromyalgia, reflex sympathetic dystrophy, pain  
XX CC associated with inflammatory conditions, rheumatoid arthritis or  
XX CC inflammatory arthritis, or pain resulting from conditions associated with  
XX CC neurogenic or neuropathic pain), epilepsy, nicotine addiction, or  
XX CC schizophrenia. Parkinson's disease, small cell lung carcinoma, or  
XX CC Alzheimer's disease. The alpha-conotoxin-like peptide is also useful for  
XX CC accelerating recovery from nerve injury. The peptides are also useful as  
XX CC research reagents for investigating nicotinic acetylcholine receptor  
XX CC physiology and pharmacology. The current sequence represents a PCR primer  
XX CC for the isolation of peptide Vcl.1  
XX SQ Sequence 20 BP; 4 A; 2 C; 8 G; 6 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 889 AACATCATCACATGCACA 907  
DB 20 AACATCATCCGATGCCCA 2  
RESULT 798  
ADA44788  
XX ID ADA44788 standard; DNA; 20 BP.  
XX AC ADA44788;  
XX DT 20-NOV-2003 (first entry)  
XX DE Antisense oligonucleotide #ISIS 115460 #SEQ ID 86.  
XX KW Antisense oligonucleotide; cytosstatic; immunosuppressive;  
XX KW antiinflammatory; gene therapy; hyperproliferative disorder; cancer;  
XX KW autoimmune; inflammatory disorder; inhibitor-kappa B kinase-gamma; ss;  
XX KW human.  
XX OS Homo sapiens.  
XX PN Key Location/Qualifiers  
XX FT modified\_base 1..20  
XX FT /tag= b  
XX FT /mod\_base= OTHER  
XX FT /note= "Phosphorothioate linkages, all cytosines are 5-  
XX FT methylcytosine"  
XX FT modified\_base 1..5  
XX FT /tag= a  
XX FT /mod\_base= OTHER

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FT FT      /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT PD      /tag= c
FT FT
FT FT      /mod_base= OTHER
FT FT      /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX XX
XX PN      WO2003031576-A2.
XX
XX PD      17-APR-2003.
XX
XX PF      03-OCT-2002; 2002WO-US031809.
XX
XX PR      06-OCT-2001; 2001US-00972607.
XX
XX PA      (ISIS-) ISIS PHARM INC.
XX
XX PI      Monia BP, Wyatt JR;
XX
XX DR      WPI; 2003-457242/43.
XX
XX ST      New compound having sequence targeted to nucleic acid encoding inhibitor-
XX kappa B kinase-gamma, useful for preparing composition for treating e.g.,
XX cancer, or inflammatory or autoimmune disorder.
XX
XX PS      Claim 3; Page 78; 106pp; English.
XX
XX CC      The invention relates to an antisense compound that is targeted to a
XX nucleic acid encoding inhibitor-kappa B kinase-gamma, specifically
XX hybridizing to the nucleic acid encoding inhibitor-kappa B kinase-gamma
XX and inhibiting its expression. Compounds of the invention are antisense
XX oligonucleotides comprising at least one modified internucleoside
XX linkage, which is a 2'-O-methoxyethyl sugar moiety, at least one modified sugar
XX moiety, which is a 2'-O-methoxyethyl sugar moiety, or at least one
XX modified nucleobase, which is a 5-methylcytosine. Preferably, the
XX antisense oligonucleotide is a chimeric oligonucleotide. The compound of
XX the invention is useful for preparing a composition for treating a
XX hyperproliferative disorder e.g., cancer, or an autoimmune or
XX inflammatory disorder. The methods are useful for inhibiting the
XX expression of inhibitor-kappa B kinase-gamma in cells or tissues, and
XX treating an animal having a disease or condition associated with
XX inhibitor-kappa B kinase-gamma. Sequences given in AD44713-AD44790
XX represent antisense oligonucleotides for the inhibition of human
XX inhibitor-kappa B kinase-gamma mRNA levels.
XX
XX SQ      Sequence 20 BP; 3 A; 8 C; 8 G; 1 T; 0 U; 0 Other;
XX
XX      Query Match      0.8%; Score 14.2; DB 1; Length 20;
XX      Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX      Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY      78 AGGCGCCCGCGGCTCTGAG 96
XX      |||||
XX DB      1 AGGCGCCCGCGGCTCTGAG 19
XX
XX RESULT 799
XX ABT34198/C
XX ID ABT34198 standard; DNA; 20 BP.
XX
XX AC ABT34198;
XX
XX DT 12-JUN-2003 (first entry)
XX
XX DE Mouse short heterodimer partner-1 expression oligo SEQ ID NO 73.
XX
XX KW Antiarteriosclerotic; cardiant; vasotropic; antineoplastic; cytostatic;
XX antiinflammatory; inhibitor; antisense gene therapy; atherosclerosis;
XX short heterodimer partner-1; abnormal; lipid; cholesterol metabolism;
XX cardiovascular disease; infection; inflammation; tumour formation; mouse;
XX antisense; ds.
XX
XX OS Unidentified.
XX

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PN WO2003012033-A2.
XX
XX PD 13-FEB-2003.
XX
XX PF 17-JUL-2002; 2002WO-US023245.
XX
XX PR 31-JUL-2001; 2001US-00919197.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Crooke RM, Graham MJ;
XX
XX DR WPI; 2003-248161/24.
XX
XX ST New antisense oligonucleotide targeted to a nucleic acid encoding short
XX heterodimer partner-1, useful for treating diseases involving abnormal
XX lipid or cholesterol metabolism, e.g atherosclerosis or cardiovascular
XX diseases.
XX
XX PS Claim 3; Page 95; 121pp; English.
XX
XX CC The invention relates to a novel compound of 8 - 50 nucleobases in length
XX targeted to a nucleic acid molecule encoding a short heterodimer partner-
XX 1. The novel compound specifically hybridizes with a nucleic acid
XX molecule encoding the short heterodimer partner-1, and inhibits the
XX expression of the nucleic acid molecule. The compound, and a composition
XX comprising it are useful for treating a disease or condition associated
XX with the short heterodimer partner-1, particularly a condition involving
XX abnormal lipid or cholesterol metabolism such as atherosclerosis or a
XX cardiovascular disease. They are also useful in research and diagnostics
XX for modulating the expression of short heterodimer partner-1. They can
XX also be useful prophylactically in preventing or delaying infection,
XX inflammation or tumour formation. This polynucleotide sequence represents
XX a mouse antisense oligo relating to the heterodimer partner-1 of the
XX invention
XX
XX SQ Sequence 20 BP; 9 A; 4 C; 7 G; 0 T; 0 U; 0 Other;
XX
XX      Query Match      0.8%; Score 14.2; DB 1; Length 20;
XX      Best Local Similarity 84.2%; Pred. No. 7.3e+02;
XX      Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY      1111 CCTGACATCCTCTGGGT 1129
XX      |||||
XX DB      20 CCTCTCTCTCTGGGT 2
XX
XX RESULT 800
XX ACC49703/C
XX ID ACC49703 standard; DNA; 20 BP.
XX
XX AC ACC49703;
XX
XX DT 01-JUL-2003 (first entry)
XX
XX DE Human KSR chimeric phosphorothioate oligonucleotide SEQ ID NO:73.
XX
XX KW Human; kinase suppressor of ras-1; KSR; cytostatic; KSR inhibitor;
XX antisense gene therapy; hyperproliferative disorder; phosphorothioate;
XX developmental disorder; antisense oligonucleotide; ss.
XX
XX OS Homo sapiens.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate backbone"
XX FT modified_base 1..5
XX FT /tag= b
XX FT /mod_base= OTHER
XX FT /note= "2'-O-methoxyethyls (2'-MOE)"
XX FT

```

FT modified\_base 16. .20  
FT /\*tag= c  
FT /\*mod\_base= OTHER  
FT /\*not= "2'-O-methoxyethyls (2'-MOE) "

PN WO2003025144-A2.

XX 27-MAR-2003.

XX 19-SEP-2002; 2002WO-US029705.

XX 20-SEP-2001; 2001US-00961001.

XX (ISIS-) ISIS PHARM INC.

XX Monia BP, Freier SM;

XX WPI; 2003-363140/34.

PT New compounds, particularly antisense oligonucleotides targeted to a  
PT nucleic acid encoding KSR, useful for treating a disease/condition  
PT associated with KSR, such as hyperproliferative or developmental  
PT disorders.

XX Example 15; Page 75; 102pp; English.

CC The present invention describes a compound 8-50 nucleobases in length  
CC targeted to, and which specifically hybridizes with a nucleic acid  
CC molecule encoding kinase suppressor of ras-1 (KSR), and inhibits the  
CC expression of KSR. Also described: (1) a compound 8-50 nucleobases in  
CC length that specifically hybridizes with at least an 8-nucleobase portion  
CC of an active site on a nucleic acid molecule encoding KSR; (2) a  
CC composition comprising the compound and a carrier or diluent; (3)  
CC inhibiting the expression of KSR in cells or tissues by contacting the  
CC cells or tissues with the compound so that expression of KSR is inhibited  
CC ; and (4) treating an animal having a disease or condition associated  
CC with KSR by administering to the animal a therapeutic or prophylactic  
CC amount of the compound so that expression of KSR is inhibited. The  
CC compound has cytostatic activity and can be used as a KSR inhibitor, and  
CC in antisense gene therapy. The compound, composition and methods are  
CC useful for treating a disease or condition associated with KSR, such as a  
CC hyperproliferative or developmental disorder, or a disease or condition  
CC arising from aberrant apoptosis by inhibiting the expression of KSR. They  
CC are also useful in research and diagnostics for modulating the expression  
CC of KSR. The present sequence represents a chimeric phosphorothioate  
CC antisense oligonucleotide of human KSR, which is used in an example from  
CC the present invention

SQ Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 366 GAGTACACGAGCTTCAGCC 384

DB 19 GAGAGACCCAGCTTCAGCC 1

RESULT 801

ID ACC50005/c  
XX ACC50005 standard; DNA; 20 BP.

XX AC ACC50005;

XX 14-JUL-2003 (first entry)

XX Oligonucleotide primer ITS3.

XX Mitochondria; fungal pathogen; PCR; primer; ss.

XX Synthetic.

PN WO2003027635-A2.

XX 03-APR-2003.

XX 19-SEP-2002; 2002WO-US030311.

XX 24-SEP-2001; 2001US-00961755.

XX (SYGN ) SYNGENTA PARTICIPATIONS AG.

XX Beck JU, Barnett CJ;

XX WPI; 2003-363229/34.

PT Detecting a fungal pathogen, useful for monitoring disease development,  
PT comprises subjecting the DNA to PCR amplification using at least one  
PT primer having sequence identity with at least 10 contiguous nucleotides  
PT of Fusarium spp.

PS Claim 6; Page 17; 44pp; English.

CC This invention relates to the detection of a fungal pathogen comprising  
CC isolating DNA from a plant leaf infected with a pathogen. The methods and  
CC primers are useful for identifying fungal isolates of fungal pathogens  
CC and monitoring of disease development in plant populations. The present  
CC sequence represents an oligonucleotide primer used to detect Fusarium ear  
CC rot pathogens

SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 7.3e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1549 CTTGCGTCTTCGTCGATGC 1567

DB 19 CTGCGTCTTCATCGATGC 1

RESULT 802

ID ACC50004 standard; DNA; 20 BP.

XX AC ACC50004;

XX 14-JUL-2003 (first entry)

XX Oligonucleotide primer ITS2.

XX Mitochondria; fungal pathogen; PCR; primer; ss.

XX Synthetic.

XX WO2003027635-A2.

XX 03-APR-2003.

XX 19-SEP-2002; 2002WO-US030311.

XX 24-SEP-2001; 2001US-00961755.

XX (SYGN ) SYNGENTA PARTICIPATIONS AG.

XX Beck JU, Barnett CJ;

XX WPI; 2003-363229/34.

PT Detecting a fungal pathogen, useful for monitoring disease development,  
PT comprises subjecting the DNA to PCR amplification using at least one  
PT primer having sequence identity with at least 10 contiguous nucleotides  
PT of Fusarium spp.

PS Claim 6; Page 17; 44pp; English.



```
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1610 TCTAAGCCACAGCGAGG 1628
    |||||
Db 20 TCCAAGCCTCAGACCCAGG 2

RESULT 805
ADA26668/c
ID ADA26668 standard; DNA; 20 BP.
XX AC
XX ADA26668;
XX DT
XX 20-NOV-2003 (first entry)
XX DE
XX Rat Jun N-terminal kinase, JNK1, antisense oligonucleotide ISIS21867.
XX es; rat; Jun N-terminal kinase; JNK1; JNK2; JNK3; antisense; cytostatic;
KW antinflammatory; apoptosis; prostate cancer; prostate tumour;
KW inflammation; fibrosis; fibrotic disease; fibrotic scarring;
KW peritoneal adhesion; lung fibrosis; conjunctival scarring;
KW hyperproliferative disease; cancer; probe.
XX OS
XX Rattus norvegicus.
XX FH
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /*note= "All cytosines are 5-methyl-cytosines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /*note= "2'-methoxyethoxy-modified and phosphorothioate
FT linkages"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /*note= "2'-methoxyethoxy-modified and phosphorothioate
FT linkages"
XX FT
XX US2003004120-A1.
XX PN
XX 02-JAN-2003.
XX PD
XX 31-JAN-2001; 2001US-00774809.
XX PF
XX 13-AUG-1997; 97US-00910629.
XX PR 07-AUG-1998; 98US-00130616.
XX PR 07-APR-1999; 99US-00287796.
XX PR 15-SEP-1999; 99US-00396902.
XX XX
XX (MCKAY/) MCKAY R.
XX PA (DEAN/) DEAN N M.
XX PA (MONI/) MONIA B P.
XX PA (NERO/) NERO P.
XX PA (GAAR/) GAARDE W A.
XX XX
XX Mckay R, Dean NM, Monia BP, Nero P, Gaarde WA;
XX PI WPI; 2003-311908/30.
XX DR
XX New oligonucleotides which hybridizes to, and modulates the expression of
XX Jun N-terminal kinase, useful for treating a disease or condition
XX PT characterized by a reduction in apoptosis, e.g. prostate cancer,
XX PT inflammation or fibrosis.
XX PT
XX Example 7; Page 33; 69pp; English.
XX PS
XX The invention relates to an oligonucleotide (antisense, AS) comprising 8-
XX CC 30 nucleotides connected by covalent linkages, where the oligonucleotide
XX CC
```

```
CC has a sequence specifically hybridisable with a nucleic acid encoding a
CC Jun N-terminal kinase (JNK) protein and modulates the expression of the
CC JNK protein. Also included are a pharmaceutical composition comprising
CC the AS oligonucleotide (or its bioequivalent, and a pharmaceutical
CC carrier), treating an animal having/suspected of having/prone to having a
CC hyperproliferative disease (by administering to a prophylactic or
CC therapeutic amount of the composition of the AS oligonucleotide),
CC modulating the expression of a JNK protein in cells or tissues by
CC contacting the cells or tissues with the AS oligonucleotide, modulating
CC the cell cycle progression (or the phosphorylation of a protein
CC phosphorylated by a JNK protein, or expression of a cellular protein that
CC promotes one or more metastatic events in cultured cells or the cells of
CC an animal) by administering the oligonucleotide to the cells, inhibiting
CC the growth of a tumour in an animal by administering the oligonucleotide,
CC inducing apoptosis in a cell by contacting a cell with an AS
CC oligonucleotide for JNK2 and treating a human having a disease or
CC condition associated with a JNK protein or characterised by a reduction
CC in apoptosis by administering a prophylactic or therapeutic amount of the
CC AS oligonucleotide. The antisense oligonucleotide is useful for treating
CC a disease or condition characterised by a reduction in apoptosis, such as
CC prostate cancer or prostate tumour, inflammation, fibrosis or fibrotic
CC disease or condition (e.g. fibrotic scarring, peritoneal adhesions, lung
CC fibrosis or conjunctival scarring), hyperproliferative disease or
CC condition, such as cancer. The antisense oligonucleotides may also be
CC used as research agents and diagnostic aids, to detect the presence of
CC JNK protein-specific nucleic acids in a cell or tissue sample, and to
CC study the function of one or more genes in the animal. The present
CC sequence is an antisense oligonucleotide targeting a rat JNK sequence.
XX SQ
XX Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
```

```
Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY 1424 GGATCTCCGACGAGGATGC 1442
```

```
Db 20 GGATCTCCGACGAGGAC 2
```

```
RESULT 806
```

```
AAAD52299
```

```
ID AAAD52299 standard; DNA; 20 BP.
```

```
XX AC AAAD52299;
```

```
XX 02-MAY-2003 (first entry)
```

```
XX Human IFNGR2 antisense oligonucleotide, ISIS #142777.
```

```
XX Antisense; interferon gamma receptor 2; autoimmune disorder; cancer;
XX autoimmune thyroiditis; autoimmune insulinitis; multiple sclerosis;
XX diabetes; autoimmune arthritis; Crohn's disease; apoptosis; IFNGR2;
XX gene therapy; prophylaxis; human; phosphorothioate; ss.
```

```
XX Homo sapiens.
```

```
XX Synthetic.
```

```
XX Key Location/Qualifiers
```

```
XX modified_base 1..20
```

```
XX /*tag= a
```

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XX /mod_base= OTHER
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```
XX /*note= "Phosphorothioate backbone; All cytidine residues
XX are 5-methylcytidines"
```

```
XX modified_base 1..5
```

```
XX /*tag= b
```

```
XX /mod_base= OTHER
```

```
XX /*note= "2'-methoxyethyl nucleotides"
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```
XX modified_base 16..20
```

```
XX /*tag= c
```

```
XX /mod_base= OTHER
```

```
XX /*note= "2'-methoxyethyl nucleotides"
```

```
XX FT
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PN WC200288163-A1.  
XX 07-NOV-2002.  
XX 16-APR-2002; 2002WO-US012007.  
XX 26-APR-2001; 2001US-00843377.  
XX (ISIS-) ISIS PHARM INC.  
XX Bennett CF, Watt AT;  
XX WPI; 2003-156688/15.  
XX New antisense oligonucleotides for modulating interferon gamma receptor  
XX 2, particularly useful for treating autoimmune disorders (e.g. multiple  
XX sclerosis or Crohn's disease), cancers or diseases caused by aberrant  
XX apoptosis.  
XX Claim 3; Page 85; 127pp; English.  
XX The invention relates to antisense compounds, composition and methods for  
XX modulating the expression of human interferon gamma receptor 2 (IFNGR2).  
XX The compositions comprise antisense compounds targeted to nucleic acids  
XX encoding IFNGR2. Antisense compounds of the invention are useful for  
XX treating diseases or conditions associated with IFNGR2, e.g. autoimmune  
XX disorder (e.g. autoimmune thyroiditis, diabetes, multiple sclerosis,  
XX autoimmune arthritis, autoimmune insulinitis or Crohn's disease), cancer,  
XX or a disease/disorder caused by aberrant apoptosis. They are also useful  
XX for diagnostics, therapeutics, prophylaxis or as research reagents or  
XX kits. The invention is useful in gene therapy. The present sequence is an  
XX antisense oligonucleotide targeted to human IFNGR2 DNA  
XX Sequence 20 BP; 4 A; 3 C; 8 G; 5 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Qy 62 TGCTGAAACCCAGGGGAGG 80  
Db 2 TGCTGAAGCTCAGTGGAGG 20  
RESULT 807  
AAD55498/C  
ID AAD55498 standard; DNA; 20 BP.  
XX AAD55498;  
XX 07-AUG-2003 (first entry)  
XX Human FGFR-3 antisense oligonucleotide, ISIS #125204.  
XX Human; antisense; fibroblast growth factor receptor 3; prophylaxis;  
XX developmental disorder; hyperproliferative disorder; antisense therapy;  
XX FGFR-3; ACH; JTK4; CEK2; cancer; phosphorothioate; ss.  
XX Homo sapiens.  
XX Synthetic.  
XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidine residues  
FT are 5-methylcytidines"  
FT modified\_base 1..5  
FT /tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
FT modified\_base 16..20  
FT /tag= c

FT /mod\_base= OTHER  
FT /note= "2 -methoxyethyl (2'-MOE) nucleotides"  
XX WO2003023004-A2.  
XX 20-MAR-2003.  
XX 06-SEP-2002; 2002WO-US028549.  
XX 10-SEP-2001; 2001US-00953047.  
XX (ISIS-) ISIS PHARM INC.  
XX Monia BP, Wyatt JR;  
XX WPI; 2003-313244/30.  
XX Novel compound targeted to a nucleic acid molecule encoding fibroblast  
XX growth factor receptor 3, useful for inhibiting the expression of the  
XX receptor and for treating an animal having cancer or developmental  
XX disorder.  
XX Claim 3; Page 79; 120pp; English.  
XX The invention relates to antisense compounds targeted to a nucleic acid  
XX molecule encoding fibroblast growth factor (FGF) receptor 3 (also known  
XX as FGFR-3, ACH, JTK4 and CEK2) to inhibit its expression. Antisense  
XX compounds of the invention are useful for treating diseases or conditions  
XX associated with FGFR-3 such as developmental disorders or  
XX hyperproliferative disorders, especially cancer of colorectal, bladder,  
XX bone, lung, cervical, breast or skin. They are useful as research  
XX reagents, therapeutics, prophylaxis, kits and diagnostics, and as tools  
XX in differential and/or combinatorial analyses to elucidate expression  
XX patterns of a portion of the genes expressed within cells and tissues.  
XX They are also useful in antisense therapy. The present sequence is an  
XX antisense oligonucleotide targeted to human FGFR-3  
XX Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Qy 335 ACGAGGACTTGAAGATGGG 353  
Db 20 ACGGTAACCTGAAGATGGG 2  
RESULT 808  
AAL55617/C  
ID AAL55617 standard; DNA; 20 BP.  
XX AAL55617;  
XX 29-JUL-2003 (first entry)  
XX Fungal universal ITS3 PCR primer - used to amplify ITS2 region DNA.  
XX Fungal; ITS3; interspace 3 region; ss; fermentation process; lovastatin;  
XX exocellular pravastatin production; statin; HMG-CoA; primer; PCR;  
XX cholesterol synthesis; cholesterol-lowering drug;  
XX hydroxy-methylglutaryl coenzyme A reductase.  
XX Fungi sp.  
XX EP1266967-A1.  
XX 18-DEC-2002.  
XX 15-JUN-2001; 2001EP-00114462.  
XX 15-JUN-2001; 2001EP-00114462.



PA (GNOS-) GNOSIS SRL.

XX Benedetti A, Manzoni M, Nichele M, Rollini M;

XX WPI; 2003-423103/40.

XX Fermentation useful for producing pravastatin involves pre-fermenting  
PT fungal strain in first nutrient medium, and then fermenting strain in  
PT second nutrient medium.

XX Disclosure; Page 10; 15pp; English.

XX The invention relates to a novel fermentation process to be used in the  
CC production of exocellular pravastatin and lovastatin which comprises  
CC cultivating microorganisms from *Aspergillus* and *Monascus* species. Statins  
CC are fungal secondary metabolites which inhibit hydroxy-methylglutaryl  
CC coenzyme A (HMG-CoA) reductase, the first committed enzyme of cholesterol  
CC synthesis. Statins are therefore used as cholesterol-lowering drugs. The  
CC fermentation process facilitates the production of extracellular  
CC pravastatin, either in a cell-associated form or releasable into the  
CC culture broth, directly, as a secondary metabolite, in the fermentation  
CC culture medium. Those production processes currently in existence  
CC generate relatively low yields. In contrast, the process of the invention  
CC produces relatively high yields of pravastatin i.e. at least 500 mg/l  
CC using *Aspergillus terreus* and a very high yield i.e. 1 - 4 g/l using  
CC *Monascus ruber*. In addition, the process uses simple and complex carbon  
CC sources obtained from agricultural waste thereby reducing production  
CC costs. The current sequence is that of the fungal universal ITS3 PCR  
CC primer of the invention which was used to amplify the *Aspergillus terreus*  
CC (DSM 13596) ITS2 region DNA

XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 7.3e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCGATGC 1567

DB 19 CTGCGTCTTCATCGATGC 1

RESULT 809

ABX33731

ID ABX33731 standard; DNA; 20 BP.

XX AC ABX33731;

XX 10-FEB-2003 (first entry)

XX PCR primer #14 for human oestrogen receptor alpha (ESR1) gene.

XX Human; oestrogen receptor alpha; ESR1; cancer; osteoporosis;  
KW cardiovascular disorder; variant oestrogen receptor; ESR1 haplotype;  
KW ESR1 polymorphism detection; cytostatic; osteopathic; cardiant; PCR;  
KW primer; ss.

XX *Homo sapiens*.

XX US2002123095-A1.

XX 05-SEP-2002.

XX 21-AUG-2001; 2001US-00933267.

XX 20-OCT-1999; 99US-0160626P.

XX 22-FEB-2000; 2000US-0183756P.

XX 20-OCT-2000; 2000US-00692414.

XX 24-JAN-2001; 2001US-00768184.

XX 13-MAR-2001; 2001US-00804076.

XX 05-APR-2001; 2001US-00826314.

XX (PEKE ) PE CORP NY.

XX Kalush F, Cassel MJ, Hwang SS, Winn-Deen ES;

XX WPI; 2003-066793/06.

XX Novel isolated estrogen receptor alpha variant peptide, useful in  
PT development of diagnostics and therapies for diseases or disorders  
PT mediated/modulated by the estrogen receptor, or as immunogens to raise  
PT antibodies.

XX Claim 1; Fig 2d; 186pp; English.

XX The present invention relates to the sequencing of genomic DNA encoding  
CC human oestrogen receptor alpha (ESR1) protein. The gene encoding human  
CC ESR1 is located on chromosome 6. The invention provides the genomic  
CC structure of the ESR1 gene and novel single nucleotide polymorphisms  
CC (SNPs)/haplotypes in the genes. The polymorphisms/haplotypes can lead to  
CC a variety of disorders (such as cancer, osteoporosis, and cardiovascular  
CC disorders) that are mediated by a variant oestrogen receptor. The  
CC invention provides methods of detecting ESR1 polymorphisms/haplotypes in  
CC a sample, methods of determining a risk of having or developing a  
CC disorder mediated by a variant oestrogen receptor and methods for  
CC screening compounds useful for treating such disorders. ABX33718-ABX33755  
CC represent PCR primers for the human ESR1 gene

XX Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 7.3e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 826 TCCTCACCCCTGCTTTG 844

DB 1 TCCACACAGCCTGCTTTG 19

RESULT 810

ACC47147/c

ID ACC47147 standard; DNA; 20 BP.

XX AC ACC47147;

XX 23-JUN-2003 (first entry)

XX Nucleotide sequence of 5'-biotin-labeled universal capture probe ITS3-B.

XX Dimorphic fungus; internal transcribed spacer-2; ITS2; fungal infection;  
KW probe; ss.

XX Synthetic.

XX WO2003027329-A1.

XX 03-APR-2003.

XX 25-SEP-2002; 2002WO-US030605.

XX 26-SEP-2001; 2001US-0325241P.

XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.

XX Lindsley MD, Qin Z, Choi JS, Morrison CU;

XX WPI; 2003-354661/33.

XX Detecting a dimorphic fungus, useful for diagnosing fungal infections,  
PT comprises detecting the presence or absence of an internal transcribed  
PT spacer-2 (ITS2) nucleic acid sequence of a dimorphic fungus within a  
PT sample.

XX Claim 5; Page 35; 71pp; English.

XX The invention relates to detecting a dimorphic fungus. The method

CC involves detecting the presence or absence of an internal transcribed  
 CC spacer-2 (ITS2) nucleic acid sequence of a dimorphic fungus within a  
 CC sample, where the presence of the ITS2 nucleic acid sequence indicates  
 CC the sample was contacted by the dimorphic fungus. The method is useful  
 CC for detecting or diagnosing fungal infections. The array is useful for  
 CC screening a sample for the presence of, or contamination by a dimorphic  
 CC fungus. The present sequence represents a 5'-biotin-labeled universal  
 CC capture probe, used for detecting a dimorphic fungus

XX  
 SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1549 CTTCGGTCTTCCTCGATGC 1567  
 |||||  
 DB 19 CTTCGGTCTTCCTCGATGC 1

RESULT 811  
 AAL62456/C  
 ID AAL62456 standard; DNA; 20 BP.  
 AC AAL62456;  
 XX  
 XX  
 DT 06-OCT-2003 (first entry)  
 XX  
 DE Human ABC transporter MHC I antisense oligonucleotide, ISIS 206637.  
 XX  
 XX ABC transporter; ABCT; major histocompatibility complex; MHC; cytostatic;  
 XX hyperproliferative; autoimmune disorder; antisense gene therapy;  
 XX inflammation; tumour formation; immunosuppressive; antimicrobial; human;  
 XX phosphorothioate backbone; antisense; ss.  
 XX Homo sapiens.  
 OS Synthetic.  
 XX

Key Location/Qualifiers  
 modified\_base 1..20  
 /tag= a  
 /mod\_base= OTHER  
 /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"  
 modified\_base 1..5  
 /tag= b  
 /mod\_base= OTHER  
 /note= "2'-methoxyethyl nucleotides"  
 modified\_base 16..20  
 /tag= c  
 /mod\_base= OTHER  
 /note= "2'-methoxyethyl nucleotides"  
 WO2003051309-A2.  
 26-JUN-2003.  
 12-DEC-2002; 2002WO-US040101.  
 17-DEC-2001; 2001US-00024369.  
 (ISIS-) ISIS PHARM INC.  
 Borchers AH, Ward DT, Preier SM;  
 WPI; 2003-577305/54.  
 New antisense compound that hybridizes and inhibits the nucleic acid  
 encoding ABC transporter major histocompatibility complex 1, for treating  
 diseases or conditions such as a hyperproliferative or autoimmune  
 disorder.  
 Claim 3; Page 81; 112pp; English.

XX  
 CC The invention relates to a compound targetted to a nucleic acid molecule  
 CC encoding ABC transporter (ABCT) major histocompatibility complex (MHC) 1  
 CC where the compound specifically hybridises with the nucleic acid molecule  
 CC and inhibits expression of ATM or specifically hybridises with at least a  
 CC portion of an active site on the nucleic acid molecule. The invention is  
 CC useful for inhibiting the expression of ATM in cells or tissues. The  
 CC invention is useful for treating an animal with hyperproliferative or  
 CC autoimmune disorder. The invention is useful for diagnostics,  
 CC therapeutics, prophylaxis, as research reagents and kits, for  
 CC distinguishing functions of various members of a biological pathway and  
 CC in antisense gene therapy. The invention is also useful prophylactically  
 CC e.g., to prevent or delay infection, inflammation or tumour formation.  
 CC The present sequence is an antisense oligo targetted to human ABC  
 CC transporter MHC I DNA. This sequence is used to illustrate the method of  
 CC the invention

XX  
 SQ Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1461 COTCAGCTCTGGGAGCGG 1479  
 |||||  
 DB 20 COTCAGCTCTGGGAGCGG 2

RESULT 812  
 AAL60972/C  
 ID AAL60972 standard; DNA; 20 BP.  
 XX  
 AC AAL60972;  
 XX  
 DT 22-SEP-2003 (first entry)  
 XX  
 DE Human MyD88 antisense oligonucleotide, ISIS #190957.  
 XX  
 XX Antisense; human; myeloid differentiation primary response gene 88;  
 KW MyD88; Alzheimer's disease; neurodegenerative disease; schizophrenia;  
 KW gene therapy; Down's syndrome; phosphorothioate; ss.  
 XX Homo sapiens.  
 OS Synthetic.  
 XX

Key Location/Qualifiers  
 modified\_base 1..20  
 /tag= a  
 /mod\_base= OTHER  
 /note= "Phosphorothioate backbone; All cytidine residues are 5-methylcytidines"  
 modified\_base 1..5  
 /tag= b  
 /mod\_base= OTHER  
 /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
 modified\_base 16..20  
 /tag= c  
 /mod\_base= OTHER  
 /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
 WO2003046132-A2.  
 05-JUN-2003.  
 20-NOV-2002; 2002WO-US037411.  
 23-NOV-2001; 2001US-00021707.  
 (ISIS-) ISIS PHARM INC.  
 Karras JG, Dobie K;  
 WPI; 2003-505193/47.

XX New antisense compound, having a sequence targeted to a nucleic acid  
PT encoding MyD88, useful for preparing a composition for treating  
PT neurodegenerative disease, e.g. Alzheimer's disease.  
XX  
XX  
PS Claim 3; Page 76; 106pp; English.  
XX  
XX The invention relates to antisense compounds targetted to a nucleic acid  
CC encoding human MyD88 (myeloid differentiation primary response gene 88)  
CC to inhibit its expression. Antisense compounds of the invention are  
CC useful for preparing a composition for treating neurodegenerative disease  
CC e.g. Alzheimer's disease, Down's syndrome or schizophrenia. The invention  
CC is also useful in gene therapy. The present sequence is an antisense  
CC oligonucleotide targetted to human MyD88 DNA  
XX  
SQ Sequence 20 BP; 7 A; 6 C; 2 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
Qy 836 TTGCTTTTGAGTACTCGGA 854  
Db 19 TGGACTTTGAGTACTTGA 1  
  
RESULT 813  
ADC36216  
ID ADC36216 standard; DNA; 20 BP.  
AC ADC36216;  
XX  
DT 18-DEC-2003 (first entry)  
DE  
KW Weed controller metabolism associated PCR primer SEQ ID NO:83.  
XX  
KW weed controller metabolism; weed; herbicide; herbicide-resistant plant;  
KW agrochemical; ss; PCR; primer.  
XX  
OS Synthetic.  
XX  
XX WO2003040370-A1.  
PN  
XX  
PD 15-MAY-2003.  
XX  
XX 17-OCT-2002; 2002WO-JP010789.  
PF  
XX 19-OCT-2001; 2001JP-00321307.  
PR  
XX 07-JUN-2002; 2002JP-00167239.  
XX  
XX (SUMO ) SUMITOMO CHEM CO LTD.  
XX  
XX Nakajima H, Mukumoto F, Takaishi M;  
PI  
XX WPI; 2003-523102/49.  
DR  
XX  
XX  
PT Weed controller metabolism proteins deactivating porphyrinogen oxidase  
PT (PPO)-inhibiting herbicides by N-demethylation and their genes, useful  
PT e.g. in constructing new breeds of herbicide-resistant plants.  
XX  
XX Disclosure; SEQ ID NO 83; 812pp; Japanese.  
PS  
XX The invention relates to a novel DNA encoding a weed controller  
CC metabolism protein. A protein of the invention has herbicide activity.  
CC The proteins and their encoded genes are useful e.g. in constructing new  
CC breeds of herbicide-resistant plants and also in developing various  
CC agrochemicals. The present sequence is used in the exemplification of the  
CC invention.  
XX  
XX Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;  
SQ  
  
Query Match 0.8%; Score 14.2; DB 1; Length 20;  
Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
Qy 836 TTGCTTTTGAGTACTCGGA 854  
Db 19 TGGACTTTGAGTACTTGA 1  
  
RESULT 813  
ADC36216  
ID ADC36216 standard; DNA; 20 BP.  
AC ADC36216;  
XX  
DT 18-DEC-2003 (first entry)  
DE  
KW Weed controller metabolism associated PCR primer SEQ ID NO:83.  
XX  
KW weed controller metabolism; weed; herbicide; herbicide-resistant plant;  
KW agrochemical; ss; PCR; primer.  
XX  
OS Synthetic.  
XX  
XX WO2003040370-A1.  
PN  
XX  
PD 15-MAY-2003.  
XX  
XX 17-OCT-2002; 2002WO-JP010789.  
PF  
XX 19-OCT-2001; 2001JP-00321307.  
PR  
XX 07-JUN-2002; 2002JP-00167239.  
XX  
XX (SUMO ) SUMITOMO CHEM CO LTD.  
XX  
XX Nakajima H, Mukumoto F, Takaishi M;  
PI  
XX WPI; 2003-523102/49.  
DR  
XX  
XX  
PT Weed controller metabolism proteins deactivating porphyrinogen oxidase  
PT (PPO)-inhibiting herbicides by N-demethylation and their genes, useful  
PT e.g. in constructing new breeds of herbicide-resistant plants.  
XX  
XX Disclosure; SEQ ID NO 83; 812pp; Japanese.  
PS  
XX The invention relates to a novel DNA encoding a weed controller  
CC metabolism protein. A protein of the invention has herbicide activity.  
CC The proteins and their encoded genes are useful e.g. in constructing new  
CC breeds of herbicide-resistant plants and also in developing various  
CC agrochemicals. The present sequence is used in the exemplification of the  
CC invention.  
XX  
XX Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;  
SQ

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
Qy 1222 GTGGAGGACAGCTACACT 1240  
Db 1 GTGGAGGACAGCTACACT 19  
  
RESULT 814  
ADC35560/c  
ID ADC35560 standard; DNA; 20 BP.  
XX  
AC ADC35560;  
XX  
DT 18-DEC-2003 (first entry)  
XX  
DE Human CD81/TAPA-1 antisense oligonucleotide #20.  
XX  
KW Antisense; ss; human; CD81; TAPA-1; tetraspanin; viral infection;  
KW cocaine addiction; autoimmune disorder; antiinflammatory; antibacterial;  
KW virucide; antiparasitic; inflammatory disorder; parasitic infection;  
KW bacterial infection.  
XX  
OS Homo sapiens.  
XX  
XX  
XX Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone and all cytidines are 5  
FT -methyl cytidines"  
FT modified\_base 1..5  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl nucleotide"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl nucleotide"  
XX  
XX US2003113914-A1.  
XX  
XX 19-JUN-2003.  
PD  
XX  
XX 10-DEC-2001; 2001US-00006430.  
XX  
XX 10-DEC-2001; 2001US-00006430.  
PR  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Graham MJ, Dobie K;  
PI  
XX WPI; 2003-810907/76.  
XX  
XX Novel compound hybridizing with nucleic acid molecule encoding CD81 and  
XX inhibiting the expression of CD81, useful for treating infections and  
XX disease associated with expression of CD81 such as inflammation disorder.  
PS  
XX Claim 3; SEQ ID NO 32; 55pp; English.  
XX  
XX The invention relates to a compound (antisense oligonucleotide)  
CC hybridising with the eighth nucleobase portion of an active site on a  
CC nucleic acid molecule encoding CD81 (also known as TAPA-1, a tetraspanin)  
CC and inhibiting the expression of CD81. Also included is a composition  
CC comprising the antisense oligonucleotide and a carrier or a diluent. The  
CC antisense oligonucleotide is useful for inhibiting the expression of CD81  
CC in cells or tissues. The antisense oligonucleotide is also useful for  
CC treating infections preferably viral, bacterial and parasitic and  
CC diseases such as inflammatory disorders and autoimmune disorders. The  
CC disease or condition is characterised by chemical dependency (e.g.  
CC cocaine addiction). The present sequence is a CD81 antisense  
CC oligonucleotide of the invention.  
XX  
XX Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 7.3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 855 CAGGACCTGAGACATAC 873  
 DB 19 CAAGGATGTGAGCAGTTC 1

RESULT 815  
 AAQ51806  
 ID AAQ51806 standard; DNA; 21 BP.  
 XX AC AAQ51806;  
 XX DT 20-DEC-1993 (first entry)  
 XX DE Encodes ballast constituent in pINT69d pro-insulin fusion protein.  
 XX KW Fusion protein; ballast constituent; monkey pro-insulin; increased;  
 XX KW recombinant protein production; HMG CoA reductase;  
 KW human 3-hydroxy-3-methylglutaryl-coenzyme A-reductase;  
 KW mixed oligonucleotide; ds.  
 XX OS Synthetic.  
 XX US5227293-A.  
 XX PN 13-JUL-1993.  
 XX PD 23-APR-1992; 92US-00838221.  
 XX PF 29-AUG-1989; 89US-00399874.  
 XX PR 28-AUG-1990; 90WO-US004840.  
 XX PA (GENO) GEN HOSPITAL CORP.  
 XX PA (FARH) HOECHST AG.  
 XX STengelin S, Ulmer W, Habermann P, Uhlmann E, Seed B;  
 WPI; 1991-102070/14.  
 XX DR P-PSDB; AAR44307.  
 XX PT Prepn. of fusion proteins contg. ballast constituent and protein - giving  
 PT prods. which are protease resistant or insoluble.  
 XX PS Example 8; Col 7-8; 22pp; English.  
 XX CC Sequence AAQ51806 is a specific example of the novel generic ballast  
 CC constituent coding sequence. The invention covers fusion proteins in  
 CC which a short ballast constituent is fused to a desired protein, esp. to  
 CC modified pro-insulin, to increase recombinant production of the protein.  
 CC See AAQ51798-Q51799 and AAQ51802-Q51811  
 XX SQ Sequence 21 BP; 10 A; 6 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 885 TGGACATCATCAACATG 903  
 DB 2 TGGACATCATCAACAG 20

RESULT 816  
 AAQ57291  
 ID AAQ57291 standard; mRNA; 21 BP.  
 XX AC AAQ57291;  
 XX DT 25-MAR-2003 (revised)

DT 26-JUL-1994 (first entry)  
 XX Enzymatic RNA molecule c-myb mRNA target sequence.  
 XX KW Specific; cleavage; target RNA; protein; prophylaxis; expression;  
 KW inhibitor; inhibition; ribozyme; treatment; prevention; psoriasis;  
 KW asthma; inflammatory diseases; restenosis; cardiovascular condition;  
 KW hypertension; arthritis; ss.  
 XX OS Synthetic.  
 XX PN WO9402595-A1.  
 XX PD 03-FEB-1994.  
 XX PF 02-JUL-1993; 93WO-US006316.  
 XX PR 17-JUL-1992; 92US-00916763.  
 XX PR 07-DEC-1992; 92US-00387132.  
 XX PR 07-DEC-1992; 92US-00898848.  
 XX PR 07-DEC-1992; 92US-00898849.  
 XX PR 19-JAN-1993; 93US-00008895.  
 XX PA (RIBO-) RIBOZYME PHARM INC.  
 XX PI Sullivan SM, Draper KG;  
 XX WPI; 1994-048853/06.  
 XX PT Enzymatic RNA molecules which cleave mRNA - used to treat or prevent  
 PT inflammatory, arthritic, stenotic or cardiovascular diseases or  
 conditions.  
 XX PS Claim 3; Page 20; 65pp; English.  
 XX CC This is a c-myb mRNA target sequence (nucleotide no. 1919) of an  
 CC enzymatic RNA molecule (ribozyme) which cleaves mRNA associated with the  
 CC development or maintenance of a restenotic condition. The concn. of the  
 CC ribozyme necessary to effect a therapeutic treatment is lower than that  
 CC of an antisense oligonucleotide and the specificity of action is higher.  
 CC (Updated on 25-MAR-2003 to correct PN field.)  
 XX SQ Sequence 21 BP; 4 A; 5 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 859 GACCTGAGCAGTACCTGG 877  
 DB 1 GCCTTGTAGCAGTACCTGG 19

RESULT 817  
 AAT42247/c  
 ID AAT42247 standard; DNA; 21 BP.  
 XX AC AAT42247;  
 XX DT 20-FEB-1997 (first entry)  
 XX DE Primer derived from hlyA gene used in modified PCR method.  
 XX KW Detection; PCR; polymerase chain reaction; hybrid; antibody;  
 KW immunochemical detection; ss.  
 XX OS Synthetic.  
 XX PN CA2139070-A.  
 XX PD 24-JUN-1996.  
 XX PF 23-DEC-1994; 94CA-02139070.

XX 23-DEC-1994; 94CA-02139070.  
XX (BLAI/) BLAIS B W.  
XX Blais BW;

XX WPI; 1996-413110/42.

XX Detection of nucleic acid sequences - by polymerase chain reaction  
PT amplification, transcription using RNA polymerase and detection of  
PT RNA:DNA hybrids using antibodies.

XX Example 1; Page 16; 31pp; English.

XX A new method for the detection of nucleic acids comprises (a) amplifying  
CC a DNA by PCR using primers to which an appropriate RNA polymerase  
CC promoter has been appended; (b) transcribing the amplified DNA into RNA  
CC using an RNA polymerase; (c) forming RNA:DNA hybrids; and (d)  
CC immunochemically detecting the RNA:DNA hybrids using antibodies directed  
CC to RNA:DNA hybrids. Two primers (AAT42247, AAT42248) were selected from  
CC the hlyA gene and spanned a 730 base pair region of the gene from  
CC nucleotides 602-1332. For further use in the invention, the primer  
CC described in AAT42247 had an additional 26 nucleotides added to it  
CC corresponding to T7 RNA polymerase promoter sequence. The resulting  
CC primer is described in AAT42249

XX Sequence 21 BP; 8 A; 1 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1503 TTCATATTGCACTAAG 1521

DB 19 TTCCATCTTCCACTAAG 1

RESULT 818

AAV51809

ID AAV51809 standard; DNA; 21 BP.

XX AAV51809;

XX 02-FEB-1999 (first entry)

XX Zea mays genome reverse PCR primer #105.

XX Polymorphic marker; allele-specific; probe; amplification; PCR primer;  
KW hybridisation; plant; hybrid certification; genetic contribution;  
KW progeny; back-cross; hybrid; ancestry; corn; ss.

XX Synthetic.

XX Zea mays.

XX WO9824796-A1.

XX 11-JUN-1998.

XX 01-DEC-1997; 97WO-US021782.

XX 02-DEC-1996; 96US-0032069P.

XX 07-MAR-1997; 97US-00813507.

XX (AFFY-) AFFYMETRIX INC.

XX Lemieux B, Landry BS, Sapolsky RJ, Murigneux A;

XX WPI; 1998-333252/29.

XX Brassica species allele-specific oligonucleotide probes and primers -  
PT useful for plant breeding.

PS Example 1; Page 51; 65pp; English.

XX AAV51705-V52008 are reverse PCR primers used to amplify fragments of the  
CC Zea mays genome in order to detect polymorphic markers. Such markers can  
CC be used in the construction of allele-specific primers and probes for  
CC amplification or hybridisation, e.g. to determine common or disparate  
CC ancestry between 2 or more plants, to monitor the genetic contribution of  
CC an ancestral plant, to trace the progeny of proprietary plants, in  
CC certification of a hybrid plant or to identify the progeny of a back-  
CC crossed plant with an ancestral plant

XX Sequence 21 BP; 7 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 587 CTGAGATTGCTTTGGCAA 605

DB 2 CTGAGATTGGATTGAAAA 20

RESULT 819

AAV51812

ID AAV51812 standard; DNA; 21 BP.

XX AAV51812;

XX 02-FEB-1999 (first entry)

XX Zea mays genome reverse PCR primer #108.

XX Polymorphic marker; allele-specific; probe; amplification; PCR primer;  
KW hybridisation; plant; hybrid certification; genetic contribution;  
KW progeny; back-cross; hybrid; ancestry; corn; ss.

XX Synthetic.

XX Zea mays.

XX WO9824796-A1.

XX 11-JUN-1998.

XX 01-DEC-1997; 97WO-US021782.

XX 02-DEC-1996; 96US-0032069P.

XX 07-MAR-1997; 97US-00813507.

XX (AFFY-) AFFYMETRIX INC.

XX Lemieux B, Landry BS, Sapolsky RJ, Murigneux A;

XX WPI; 1998-333252/29.

XX Brassica species allele-specific oligonucleotide probes and primers -  
PT useful for plant breeding.

XX Example 1; Page 51; 65pp; English.

XX AAV51705-V52008 are reverse PCR primers used to amplify fragments of the  
CC Zea mays genome in order to detect polymorphic markers. Such markers can  
CC be used in the construction of allele-specific primers and probes for  
CC amplification or hybridisation, e.g. to determine common or disparate  
CC ancestry between 2 or more plants, to monitor the genetic contribution of  
CC an ancestral plant, to trace the progeny of proprietary plants, in  
CC certification of a hybrid plant or to identify the progeny of a back-  
CC crossed plant with an ancestral plant

XX Sequence 21 BP; 7 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 587 CTCGAGTTCGCTTGGGA 605  
DB 2 CTCGAGTTCGCTTGGAAA 20

RESULT 820  
AAV09125/c  
ID AAX09125 standard; DNA; 21 BP.

XX AC AAX09125;  
XX DT 24-MAR-1999 (first entry)

XX XX Human biallelic polymorphic marker upstream primer #5.  
XX XX Polymorphism; biallelic; human; forensic; paternity testing; disease;

XX KW detection; phenotypic typing; characteristic; infection; hereditary;  
XX KW autoimmune disease; cancer; inflammation; drug; therapy; medication;  
XX KW treatment; marker; primer; ss.

XX OS Synthetic.  
XX OS Homo sapiens.  
XX EN W09820165-A2.

XX PD 14-MAY-1998.  
XX XX 05-NOV-1997; 97WO-US020313.  
XX PR 06-NOV-1996; 96US-0030455P.

XX FA (WHEED) WHITEHEAD INST BIOMEDICAL RES.  
XX PI Lander ES, Wang D, Hudson T;  
XX WPI; 1998-286974/25.

XX DR New isolated nucleic acid segments from the human genome - used for  
XX PT determining polymorphic forms for use in e.g. forensics, paternity  
XX PT testing or phenotypic typing for disease.

XX PS Claim 15; Page 46; 310pp; English.  
XX CC AAX09121-X10268 are allele-specific oligonucleotide primers used in the

XX CC isolation of various biallelic polymorphic markers found in the human  
XX CC genome (represented in AAX0269-X12937). These primers can be used in a

XX CC method for determining polymorphic forms in an individual for use in e.g.  
XX CC forensics, paternity testing or for phenotypic typing for diseases such

XX CC as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular  
XX CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial

XX CC hypercholesterolemia, polycystic kidney disease, hereditary  
XX CC spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary

XX CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos  
XX CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,  
XX CC autoimmune diseases, inflammation, cancer, diseases of the nervous

XX CC system, infection by pathogenic microorganisms, and characteristics such  
XX CC as longevity, appearance (e.g. baldness, obesity), strength, speed,  
XX CC endurance, fertility, and susceptibility or receptivity to particular

XX CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid  
XX CC segments can also be used to produce medicaments for the treatment or  
XX CC prophylaxis of such diseases

XX SQ Sequence 21 BP; 7 A; 2 C; 10 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

RESULT 821  
AAV08249  
ID AAV08249 standard; DNA; 21 BP.

XX AC AAV08249;  
XX DT 27-JAN-1999 (first entry)

XX DE PCR primer ABCR.EXON31.F for ABCR coding sequence.  
XX XX ATP binding cassette; ABC transporter; ABCR; Stargardt Disease; therapy;

XX KW Fundus Flavimaculatus; age-related macular degeneration; diagnosis;  
XX KW PCR primer; ss.

XX OS Synthetic.  
XX OS Homo sapiens.  
XX PN W09837764-A1.

XX PD 03-SEP-1998.  
XX XX 27-FEB-1998; 98WO-US003895.  
XX PF 27-FEB-1997; 97US-0039388P.

XX PR (BAYU) BAYLOR COLLEGE MEDICINE.  
XX PA (UJO) UNIV JOHNS HOPKINS.  
XX PA (USSH) US DEPT HEALTH & HUMAN SERVICES.

XX PA (UTAH) UNIV UTAH.  
XX XX Allikmets R, Anderson KL, Dean M, Leppart M, Lewis RA, Li Y;  
XX PI Lupeki JR, Nathans J, Rattner A, Shroyer NF, Singh N, Smallwood PM;  
XX PI Sun H;

XX WPI; 1998-495375/42.  
XX DR Retina-specific ATP-binding cassette transporter and DNA - useful for,  
XX XX e.g. diagnosis and treatment of macular degeneration, such as in

XX PT Stargardt Disease, Fundus Flavimaculatus and age-related degeneration.  
XX PT Stargardt Disease, Fundus Flavimaculatus and age-related degeneration.  
XX XX Claim 41; Page 30; 79pp; English.

XX PS This sequence represents a PCR primer for DNA encoding the human retina  
XX CC specific ATP binding cassette transporter (ABCR) of the invention. ABCR

XX CC may be used in compositions for screening agents that alters ABCR. The  
XX CC agent can inhibit Stargardt Disease, Fundus Flavimaculatus and age-

XX CC related macular degeneration (MD). Primers (such as this sequence) and  
XX CC probes for the ABCR DNA can be used in a diagnostic kit for detecting MD

XX SQ Sequence 21 BP; 6 A; 8 C; 3 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 3; Indels 0; Gaps 0;

OY 1389 CTCACCAAGCTGTTCCAG 1407  
DB 3 CATCACCAAGCTGTTCCAG 21

RESULT 822  
AAV62007/c  
ID AAV62007 standard; DNA; 21 BP.

XX AC AAV62007;  
XX DT 25-MAR-2003 (revised)

XX DT 11-JAN-1999 (first entry)  
XX XX L monocytogenes hlyA gene PCR primer A.

XX DE Detection; pathogen; amplification; RNA enhancement product; PCR primer;  
XX KW

KW DNA/RNA hybrid; *Listeria* sp; *Streptococcus* sp; *Lactobacillus* sp;  
 KW *Lactococcus* sp; *Micrococcus* sp; *Enterococcus* sp; *Staphylococcus* sp;  
 KW *Bacillus* sp; *Pseudomonas* sp; *Escherichia coli*; *Salmonella typhimurium*;  
 KW *Yersinia enterocolitica*; ss.  
 XX Synthetic.  
 OS *Listeria monocytogenes*.  
 XX US5827661-A.  
 XX 27-OCT-1998.  
 XX 23-SEP-1996; 96US-00718596.  
 XX 23-DEC-1994; 94CA-02137070.  
 XX 30-DEC-1994; 94US-00366619.  
 XX (KALY-) KALYX BIOSCIENCES INC.  
 XX Blais BW;  
 XX WPI; 1998-593985/50.  
 XX Enhanced detection by nucleic acid amplification, especially of *Listeria*  
 PT - uses formation of DNA-RNA hybrids after amplification, and then  
 PT specific immuno-detection of these.  
 XX Example 1; Col 12; 15pp; English.  
 XX AAV62007-V62009 are PCR primers used in a novel method for the enhanced  
 CC detection of DNA sequences, via a nucleic acid amplification procedure,  
 CC especially for detecting pathogens. Minute samples of pathogens (c. 10  
 CC cells) cannot be detected effectively by PCR. The minute quantities of  
 CC product formed by PCR are then transcribed into RNA enhancement products,  
 CC which further amplifies the target sequences to detectable levels.  
 CC Detection then takes place with antibodies for DNA:RNA hybrids, which  
 CC enable detection if the product volume formed is still small, but is  
 CC specific enough just for this type of product. The method is especially  
 CC useful for detecting the following pathogens: *Listeria monocytogenes*, *L.*  
 CC *innocua*, *L. ivanovi*, *L. seeligeri*, *L. welshimeri*, *L. murrayi*, *L. grayi*,  
 CC *Streptococcus thermophilus*, *Lactobacillus casei*, *Lactococcus lactis*,  
 CC *Micrococcus luteus*, *Enterococcus faecalis*, *Staphylococcus epidermidis*,  
 CC *Bacillus cereus*, *Bacillus subtilis*, *Pseudomonas aeruginosa*, *Escherichia*  
 CC *coli*, *Salmonella typhimurium*, or *Yersinia enterocolitica*. (Updated on 25-  
 XX MAR-2003 to correct PR field.)  
 XX Sequence 21 BP; 8 A; 1 C; 7 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1503 TTCCATATTTGGCACTAAAG 1521  
 Db 19 TTCCATCTTCCACTAATG 1  
 RESULT 823  
 AAZ26124  
 ID AAZ26124 standard; DNA; 21 BP.  
 XX AAZ26124;  
 AC AAZ26124;  
 XX 30-NOV-1999 (first entry)  
 DT Human polymorphic region 313.  
 DE  
 XX Polymorphism: human; inhibitor; cancer; treatment; cell growth; LOH;  
 KW cell viability; loss of heterozygosity; precancerous condition; ASI;  
 KW allele specific inhibitor; somatic cell; diagnosis; prevention;  
 KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;  
 KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;  
 KW graft versus host disease; malignant cell removal; bone marrow; ss.

XX Homo sapiens.  
 OS WO9841648-A2.  
 XX 24-SEP-1998.  
 XX 19-MAR-1998; 98WO-US005419.  
 XX 20-MAR-1997; 97US-0041057P.  
 XX (VARI-) VARIAGENICS INC.  
 XX Housman D, Ledley FD, Stanton VP;  
 XX WPI; 1998-521232/44.  
 XX Identifying target genes for allele-specific drugs - used for diagnosis,  
 PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,  
 PT dysplastic lesions, endometriosis or graft versus host disease.  
 XX Disclosure; Fig 7; 605pp; English.  
 XX This invention describes a novel method for identifying an inhibitor  
 CC potentially useful for treatment of cancer, where the inhibitor is active  
 CC on a gene vital for cell growth or viability, and where the gene is  
 CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is  
 CC used for preventing the development of cancer in a patient having a  
 CC precancerous condition, by administering to the patient a first allele  
 CC specific inhibitor (ASI) targeted to an allele of a first essential gene  
 CC present in cells of the precancerous condition, where the normal somatic  
 CC cells of the patient are heterozygous for the first gene, the inhibitor  
 CC is active on at least one but less than all allelic forms of the gene  
 CC present in a population and targets only one allelic form present in the  
 CC normal somatic cells, and the first gene. The products and methods can be  
 CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.  
 CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic  
 CC lesions, benign tumours, endometriosis, polycystic kidney disease, and  
 CC graft versus host disease. The method can also be used to remove  
 CC malignant cells from bone marrow transplants. AAZ25812-226825 represent  
 CC human polymorphic sites described in the method of the invention  
 XX Sequence 21 BP; 2 A; 12 C; 4 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 940 GGCTGGCCTACTGCGACC 958  
 Db 3 GGCTGGCCTTCCGCCACC 21  
 RESULT 824  
 AAZ26242/c  
 ID AAZ26242 standard; DNA; 21 BP.  
 XX AAZ26242;  
 AC AAZ26242;  
 XX 30-NOV-1999 (first entry)  
 DT Human polymorphic region 431.  
 DE  
 XX Polymorphism: human; inhibitor; cancer; treatment; cell growth; LOH;  
 KW cell viability; loss of heterozygosity; precancerous condition; ASI;  
 KW allele specific inhibitor; somatic cell; diagnosis; prevention;  
 KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;  
 KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;  
 KW graft versus host disease; malignant cell removal; bone marrow; ss.  
 XX Homo sapiens.  
 XX WO9841648-A2.  
 PN

```
XX 24-SEP-1998.
XX 19-MAR-1998; 98WO-US005419.
XX 20-MAR-1997; 97US-0041057P.
XX (VARI-) VARIAGENICS INC.
XX Houseman D, Ledley FD, Stanton VP;
XX WPI; 1998-521232/44.
XX Identifying target genes for allele-specific drugs - used for diagnosis,
XX prevention and treatment of, e.g. cancers, atherosclerotic plaque,
XX dysplastic lesions, endometriosis or graft versus host disease.
XX Disclosure; Fig 7; 605pp; English.
XX This invention describes a novel method for identifying an inhibitor
XX potentially useful for treatment of cancer, where the inhibitor is active
XX on a gene vital for cell growth or viability, and where the gene is
XX subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
XX used for preventing the development of cancer in a patient having a
XX precancerous condition, by administering to the patient a first allele
XX specific inhibitor (ASI) targeted to an allele of a first essential gene
XX present in cells of the precancerous condition, where the normal somatic
XX is active on at least one but less than all allelic forms of the gene
XX present in a population and targets only one allelic form present in the
XX normal somatic cells, and the first gene. The products and methods can be
XX used in the diagnosis, prevention and treatment of LOH disorders, e.g.
XX cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
XX lesions, benign tumours, endometriosis, polycystic kidney disease, and
XX graft versus host disease. The method can also be used to remove
XX malignant cells from bone marrow transplants. AA225812-226825 represent
XX human polymorphic sites described in the method of the invention
XX Sequence 21 BP; 4 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 21;
XX Best Local Similarity 84.2%; Pred. No. 7.6e-02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 235 GGTGGTGGCGGAGTGACC 253
XX 20 GGTGGTGGCGGAGTGACC 2
XX
XX RESULT 825
XX AA226102
XX ID AA226102 standard; DNA; 21 BP.
XX AC AA226102;
XX DE
XX DT 30-NOV-1999 (first entry)
XX DE Human polymorphic region 291.
XX
XX Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
XX cell viability; loss of heterozygosity; precancerous condition; ASI;
XX allele specific inhibitor; somatic cell; diagnosis; prevention;
XX atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
XX dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
XX graft versus host disease; malignant cell removal; bone marrow; ss.
XX
XX Homo sapiens.
XX
XX WO9841648-A2.
XX
XX 24-SEP-1998.
XX
XX 19-MAR-1998; 98WO-US005419.
```

```
XX 20-MAR-1997; 97US-0041057P.
XX (VARI-) VARIAGENICS INC.
XX Houseman D, Ledley FD, Stanton VP;
XX WPI; 1998-521232/44.
XX Identifying target genes for allele-specific drugs - used for diagnosis,
XX prevention and treatment of, e.g. cancers, atherosclerotic plaque,
XX dysplastic lesions, endometriosis or graft versus host disease.
XX Disclosure; Fig 7; 605pp; English.
XX This invention describes a novel method for identifying an inhibitor
XX potentially useful for treatment of cancer, where the inhibitor is active
XX on a gene vital for cell growth or viability, and where the gene is
XX subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
XX used for preventing the development of cancer in a patient having a
XX precancerous condition, by administering to the patient a first allele
XX specific inhibitor (ASI) targeted to an allele of a first essential gene
XX present in cells of the precancerous condition, where the normal somatic
XX cells of the patient are heterozygous for the first gene, the inhibitor
XX is active on at least one but less than all allelic forms of the gene
XX present in a population and targets only one allelic form present in the
XX normal somatic cells, and the first gene. The products and methods can be
XX used in the diagnosis, prevention and treatment of LOH disorders, e.g.
XX cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
XX lesions, benign tumours, endometriosis, polycystic kidney disease, and
XX graft versus host disease. The method can also be used to remove
XX malignant cells from bone marrow transplants. AA225812-226825 represent
XX human polymorphic sites described in the method of the invention
XX Sequence 21 BP; 1 A; 5 C; 10 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14.2; DB 1; Length 21;
XX Best Local Similarity 84.2%; Pred. No. 7.6e-02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 217 GCCTGGGATGAGGTGGTG 235
XX 2 GCCTGGGATGAGGTGGTG 20
XX
XX Db
XX
XX RESULT 826
XX AAX17882/c
XX ID AAX17882 standard; DNA; 21 BP.
XX AC AAX17882;
XX DE
XX DT 11-MAY-1999 (first entry)
XX DE Anti-CMV oligonucleotide #2922.
XX
XX Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
XX Cytomegalovirus; inhibition; replication; sugar modification;
XX phosphorothioate; infection; retinitis; ss.
XX
XX Synthetic.
XX Human herpesvirus 5.
XX
XX Key Location/Qualifiers
XX modified_base 1..21 a
XX /*tag= a
XX /note= "contains phosphorothioate internucleotide
XX linkages"
XX
XX WO9845314-A1.
XX
XX 15-OCT-1998.
XX
XX 07-APR-1998; 98WO-US006895.
```



XX 09-APR-1997; 97US-00838715.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Draper KG, Kisner DL, Anderson KP, Chapman S;  
 XX WPI; 1998-568330/48.  
 XX  
 XX New antisense oligonucleotides that target cytomegalovirus nucleic acid -  
 PT particularly including 2-methoxyethoxy sugar modifications, especially  
 PT for treating viral retinitis, with long-lasting retention in the retina.  
 XX  
 XX Claim 2; Page 24; 99pp; English.  
 XX  
 XX Antisense oligonucleotides (AA17861-X17924) are targeted to a nucleic  
 CC acid (AA17925-X17948) encoding IE (immediate early) 1 or 2, or DNA  
 CC polymerase of cytomegalovirus (CMV) and are able to inhibit CMV  
 CC replication. Optionally the oligonucleotides include at least one 2'-(2-  
 CC methoxyethoxy) sugar modification or phosphorothioate internucleotide  
 CC linkages. The oligonucleotides are used to inhibit CMV infections (by in  
 CC vivo or in vitro contact with cells, tissues or body fluids), especially  
 CC to treat or prevent CMV infections, particularly retinitis  
 XX  
 XX Sequence 21 BP; 0 A; 7 C; 4 G; 10 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 131 GGATGAGAGATCAACG 149  
 Db 20 GCAAGAGAGAGCAACG 2  
 RESULT 827  
 AAA07030  
 ID AAA07030 standard; DNA; 21 BP.  
 XX  
 XX AAA07030;  
 XX  
 XX 03-JUL-2000 (first entry)  
 XX  
 XX Human integrin beta 3 quantitative real-time PCR primer, SEQ ID NO:3.  
 DE  
 XX Integrin beta 3; human endothelial glycoprotein; GP3A; GPIIb; ITGB3;  
 KW CD61; platelet glycoprotein 3a; cellular adhesion; vitronectin receptor;  
 KW fibronectin receptor; expression inhibition; antisense therapy;  
 KW tumour formation; cancer invasion; bleeding disorder; inflammation;  
 KW quantitative real-time PCR primer; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX  
 XX US6037176-A.  
 PN  
 XX 14-MAR-2000.  
 PD  
 XX 25-JUN-1999; 99US-00344520.  
 PF  
 XX 25-JUN-1999; 99US-00344520.  
 PR  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Bennett CF, Cowsett LM, Monia BP;  
 PI WPI; 2000-246189/21.  
 XX  
 XX New antisense compound that inhibits human integrin beta3, useful e.g.  
 PT for treating or preventing infection, inflammation and tumors.  
 XX  
 XX Example 13; Col 39; 33pp; English.  
 PS  
 XX Sequences AAA07029-A07030 represent human integrin beta 3 PCR primers  
 CC

CC used in quantitative real-time PCR with probe AAA07031 in an  
 CC exemplification of the present invention. The invention relates to  
 CC antisense oligonucleotides targeted to the human integrin beta 3 gene,  
 CC which inhibit its expression. A series of oligonucleotides (AAA07035-  
 CC AAA07074) were designed to target different regions of the human integrin  
 CC beta 3 RNA, and were analysed for their effect on integrin beta 3 mRNA  
 CC levels by quantitative real-time PCR. GAPDH (glyceraldehyde-3-phosphate)  
 CC mRNA levels were measured as a control. Integrins constitute one of four  
 CC classes of cellular adhesion molecules, and play an important role in  
 CC cell migration, cell anchorage to substrates and cytoadhesion signalling  
 CC pathways. They are heterodimeric cation-dependent membrane glycoproteins  
 CC composed of an alpha and beta subunit. Integrin beta 3 (also known as  
 CC human endothelial glycoprotein, GP3A, GPIIb, ITGB3, CD61 and platelet  
 CC glycoprotein 3a) is the common beta subunit partner of the members of the  
 CC beta-3 subfamily of integrins. This family consists of the vitronectin  
 CC receptor (alpha-v-beta-3) and the fibronectin receptor (alpha-Iib-beta-  
 CC 3). Cells expressing this class of integrin can adhere to various matrix  
 CC proteins and participate in various cytoadhesion-driven cellular  
 CC responses. Integrin beta 3 is implicated in conditions such as vascular  
 CC restenosis, excessive bone resorption, angiogenesis (in melanoma), tumour  
 CC invasion, platelet aggregation and Glanzmann's thrombasthenia. The  
 CC oligonucleotides of the invention are useful for diagnosis, prevention  
 CC and treatment of conditions associated with integrin beta 3 expression,  
 CC such as tumour formation, inflammation, infections and the diseases  
 CC mentioned above  
 XX  
 SQ Sequence 21 BP; 5 A; 5 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 614 CCTACATTAGCTGACAA 632  
 Db 1 CCGTCATTAGCTGACAA 19  
 RESULT 828  
 AA259350/C  
 ID AA259350 standard; DNA; 21 BP.  
 XX  
 XX AA259350;  
 XX  
 XX 05-APR-2000 (first entry)  
 XX  
 XX Human STP2 gene promoter polymorphism sequence 108.  
 DE  
 XX Single nucleotide polymorphism; SNP; STP2; phenol sulphotransferase;  
 KW probe; genotyping; human; drug metabolism; ss.  
 KW  
 XX Homo sapiens.  
 OS  
 XX  
 XX Key Location/Qualifiers  
 FH Variation 11  
 FT /\*tag= a  
 FT /note= "Site of polymorphism"  
 XX  
 XX WO9964630-A1.  
 PN  
 XX 16-DEC-1999.  
 PD  
 XX 09-JUN-1999; 99WO-US013094.  
 PF  
 XX 10-JUN-1998; 98US-0088710P.  
 PR  
 XX (AXYS-) AXYS PHARM INC.  
 PA  
 XX Guida M, Kurth J;  
 PI WPI; 2000-105892/09.  
 XX  
 XX Novel nucleic acid used for genotyping, e.g. to predict rate of drug  
 PT metabolism.  
 PT

XX Claim 2; Page 17; 46pp; English.

XX Sequences AA259305-259352 are fragments of the human STP2 gene. The

CC fragments are from the 8 exons, the promoter region, 3' and 5'

CC untranslated regions of the STP2 gene. Each sequence contains a newly

CC identified STP2 gene single nucleotide polymorphism (SNP). STP2 is a

CC phenol sulphotransferase. Substrates for STP2 include monoxidil,

CC acetaminophen, and paracetamol. Several of the nucleotide changes

CC identified at the polymorphism sites, give rise to an amino acid change.

CC Amino acid changes may result in altered enzyme activity. The sequences

CC can be used as probes for detecting STP2 polymorphisms. The polymorphic

CC probes are used in screening and genotyping, i.e. to predict the rate of

CC metabolism of STP2 substrates, potential drug-drug interactions and

CC adverse side effects. They can also be used to detect diseases resulting

CC from accidental or occupational exposure to toxins and to establish

CC animal, cell or in vitro models for drug metabolism

XX

XX Sequence 21 BP; 2 A; 9 C; 2 G; 8 T; 0 U; 0 Other;

SQ

Query Match 0.8%; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 7.6e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 26 GAATGCAGAGGTAGGCAGG 44

DB 19 GAAAGCTGAGATAGGCAGG 1

RESULT 829

AAZ73744/c

ID AAZ73744 standard; DNA; 21 BP.

XX

AC AAZ73744;

XX

DT 10-SEP-2001 (first entry)

XX

DE Human biallelic marker downstream amplification primer SEQ ID NO:8100.

XX

XX Human genome; biallelic marker; high density disequilibrium map;

XX genomic map; haplotype; phenotype; polymorphic base; genotyping;

XX haplotyping; hybridisation; identification; characterisation;

XX amplification; single nucleotide polymorphism; SNP; PCR primer;

XX diagnosis; ss.

XX

OS Homo sapiens.

XX

XX WO9954500-A2.

XX

XX 28-OCT-1999.

XX

XX 21-APR-1999; 99WO-IB000822.

XX

XX 21-APR-1998; 98US-0082614P.

XX

XX 23-NOV-1998; 98US-0109732P.

XX

XX (GEST ) GENSET.

XX

XX Cohen D, Blumenfeld M, Chumakov I;

XX

XX WPI; 2000-013267/01.

XX

XX Novel biallelic markers used to construct a high density disequilibrium

XX map of the human genome.

XX

XX Claim 8; Page 1957; 2745pp; English.

XX

XX AA265654 to AA269578 represent human biallelic markers from the present

XX invention, which contain a polymorphic base at position 24 of their

XX nucleotide sequences. AA269579 to AA277440 represent amplification

XX primers for the biallelic markers. The biallelic markers of the invention

XX have a variety of uses; they can be used for high density mapping of the

XX human genome, and in complex association studies and haplotyping studies

CC

CC which are useful in determining the genetic basis for disease states.

CC Compositions and methods of the invention can also be useful for the

CC identification of the targets for the development of pharmaceutical

CC agents and diagnostic methods, as well as the characterisation of the

CC differential efficacious responses to and side effects from

CC pharmaceutical agents acting on a disease as well as other treatment.

CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and

CC 3367, are not actually given a sequence in the Sequence Listing from the

CC present invention

XX

XX Sequence 21 BP; 7 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

SQ

Query Match 0.8%; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 7.6e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 392 CGATGAGGTGACGTCTCC 410

DB 21 CAGATGATTGACGTCTCC 3

RESULT 830

AAZ56234

ID AAZ56234 standard; DNA; 21 BP.

XX

AC AAZ56234;

XX

XX 15-MAR-2000 (first entry)

XX

DE Mutated Influenza virus NA gene sequence primer SEQ ID NO:1.

XX

XX Recombinant negative strand viral RNA template; virus particle;

XX RNA directed RNA polymerase complex; expression; chimeric virus; vaccine;

XX packaging; ss.

XX

OS Influenza virus.

OS Synthetic.

XX

XX US6001634-A.

XX

XX 14-DEC-1999.

XX

XX 29-JUN-1998; 98US-00106377.

XX

XX 28-AUG-1989; 89US-00399728.

XX

XX 21-NOV-1989; 89US-00440053.

XX

XX 22-MAY-1990; 90US-00527237.

XX

XX 04-AUG-1992; 92US-00925061.

XX

XX 01-FEB-1994; 94US-00190698.

XX

XX 01-JUN-1994; 94US-00252508.

XX

XX (PALE/) PALESE P.

XX (GARC/) GARCIA-SASTRE A.

XX

XX Palese P, Garcia-Sastre A;

XX

XX WPI; 2000-071660/06.

XX

XX Chimeric virus containing influenza virus RNA segments, useful for

XX expressing heterologous gene products in appropriate host cell systems.

XX

XX Example; Col 5; 67pp; English.

XX

XX The present invention describes a chimeric virus comprising influenza

XX virus containing a heterologous RNA segment from another strain of

XX influenza virus or 8 genomic segments from different strains of influenza

XX virus, with each segment comprising the reverse complement of a mRNA

XX coding sequence operatively linked to a binding site specific for an RNA-

XX directed RNA polymerase of a negative strand RNA virus. The recombinant

XX negative strand virus RNA templates may be used to express heterologous

XX gene products in appropriate host cell systems and/or to construct

XX recombinant viruses that express, package and/or present the heterologous

XX gene product. The expression products and chimeric viruses may be used in

CC

CC vaccine formulations. AAY57746 to AAY57748, and AAZ56234 to AAZ56290,  
 CC represent sequences used in the exemplification of the present invention  
 XX Sequence 21 BP; 6 A; 3 C; 5 G; 7 T; 0 U; 0 Other;  
 SQ

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. NO. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 908 ACGTGAACCTGTTCTGTT 926  
 DB 2 ACGAGAAATGTTCTGTT 20

RESULT 831  
 AAF97537/c  
 ID AAF97537 standard; DNA; 21 BP.  
 XX  
 AC AAF97537;  
 DT 06-JUN-2001 (first entry)  
 DE Human gene single nucleotide polymorphism #2298.  
 KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;  
 KW polymorphism; vascular disease; coronary artery disease; forensics;  
 KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;  
 KW pulmonary embolism; paternity test; ds.  
 XX Homo sapiens.

XX Key Location/Qualifiers  
 FH Variation replace(11,G)  
 FT /\*tag= a  
 FT /standard\_name= "single nucleotide polymorphism"  
 XX WO200118250-A2.  
 XX 15-MAR-2001.  
 XX 07-SEP-2000; 2000WO-US024503.  
 XX 10-SEP-1999; 99US-0153357P.  
 XX 26-JUL-2000; 2000US-0220947P.  
 XX 16-AUG-2000; 2000US-0225724P.

XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
 PA (MILL-) MILLENNIUM PHARM INC.  
 XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JJ;  
 WPI; 2001-226749/23.  
 XX Nucleic acids comprising single nucleotide polymorphisms, useful in  
 PT applications such as forensics, paternity testing, medicine, genetic  
 PT analysis and phenotype correlations to diseases such as diabetes and  
 PT atherosclerosis.

XX Example; Page 204; 242pp; English.  
 XX The present invention provides a method of diagnosing a vascular disease  
 CC in an individual, involving determining the sequence at various  
 CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4  
 CC genes. The sequences at a number of polymorphic sites are also provided  
 CC in the specification. In particular, the method can be used in the  
 CC diagnosis of atherosclerosis, myocardial infarction, coronary heart  
 CC disease, stroke, peripheral vascular diseases, venous thromboembolism and  
 CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also  
 CC useful in forensics, paternity testing, genetic analysis and phenotype  
 CC correlations to diseases. The present sequence is an example of one of  
 CC the human gene SNPs shown in the specification

XX Sequence 21 BP; 3 A; 6 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. NO. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 490 GACATCCGCTGCTGAGG 508  
 DB 21 GCCCTCCGCTGCTGAGG 3

RESULT 832  
 AAF95312  
 ID AAF95312 standard; DNA; 21 BP.  
 XX  
 AC AAF95312;  
 DT 06-JUN-2001 (first entry)  
 DE Human gene single nucleotide polymorphism #73.  
 KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;  
 KW polymorphism; vascular disease; coronary artery disease; forensics;  
 KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;  
 KW pulmonary embolism; paternity test; ds.  
 XX Homo sapiens.

XX Key Location/Qualifiers  
 FH Variation replace(11,C)  
 FT /\*tag= a  
 FT /standard\_name= "single nucleotide polymorphism"  
 XX WO200118250-A2.  
 XX 15-MAR-2001.  
 XX 07-SEP-2000; 2000WO-US024503.  
 XX 10-SEP-1999; 99US-0153357P.  
 XX 26-JUL-2000; 2000US-0220947P.  
 XX 16-AUG-2000; 2000US-0225724P.

XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
 PA (MILL-) MILLENNIUM PHARM INC.  
 XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JJ;  
 WPI; 2001-226749/23.

XX Nucleic acids comprising single nucleotide polymorphisms, useful in  
 PT applications such as forensics, paternity testing, medicine, genetic  
 PT analysis and phenotype correlations to diseases such as diabetes and  
 PT atherosclerosis.

XX Example; Page 51; 242pp; English.

XX The present invention provides a method of diagnosing a vascular disease  
 CC in an individual, involving determining the sequence at various  
 CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4  
 CC genes. The sequences at a number of polymorphic sites are also provided  
 CC in the specification. In particular, the method can be used in the  
 CC diagnosis of atherosclerosis, myocardial infarction, coronary heart  
 CC disease, stroke, peripheral vascular diseases, venous thromboembolism and  
 CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also  
 CC useful in forensics, paternity testing, genetic analysis and phenotype  
 CC correlations to diseases. The present sequence is an example of one of  
 CC the human gene SNPs shown in the specification

XX Sequence 21 BP; 9 A; 5 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. NO. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 719 AACATGAAGAGGGGCACC 737  
 |||||  
 Db 1 AACATTAGAGGTGCCACC 19

RESULT 833  
 AAF96385  
 ID AAF96385 standard; DNA; 21 BP.  
 XX  
 AC AAF96385;  
 DT 06-JUN-2001 (first entry)  
 XX  
 DE Human gene single nucleotide polymorphism #1146.  
 XX  
 KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;  
 KW polymorphism; vascular disease; coronary artery disease; forensics;  
 KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;  
 KW pulmonary embolism; paternity test; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT Variation replace(11,A)  
 FT /\*tag= a  
 FT /standard\_name= "single nucleotide polymorphism"

WO200118250-A2.  
 XX  
 XX 15-MAR-2001.  
 XX  
 XX 07-SEP-2000; 2000WO-US024503.  
 XX  
 XX 10-SEP-1999; 99US-0153357P.  
 XX  
 XX 28-JUL-2000; 2000US-0220947P.  
 XX  
 XX 16-AUG-2000; 2000US-0225724P.  
 XX  
 XX (WHEED ) WHITEHEAD INST BIOMEDICAL RES.  
 XX (MILL-) MILLENNIUM PHARM INC.  
 XX  
 XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GO, Mccarthy JJ;  
 XX WPT; 2001-226749/23.

XX Nucleic acids comprising single nucleotide polymorphisms, useful in  
 XX applications such as forensics, paternity testing, medicine, genetic  
 XX analysis and phenotype correlations to diseases such as diabetes and  
 XX atherosclerosis.

XX Example; Page 130; 242pp; English.

XX The present invention provides a method of diagnosing a vascular disease  
 XX in an individual, involving determining the sequence at various  
 XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4  
 XX genes. The sequences at a number of polymorphic sites are also provided  
 XX in the specification. In particular, the method can be used in the  
 XX diagnosis of atherosclerosis, myocardial infarction, coronary heart  
 XX disease, stroke, peripheral vascular diseases, venous thromboembolism and  
 XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also  
 XX useful in forensics, paternity testing, genetic analysis and phenotype  
 XX correlations to diseases. The present sequence is an example of one of  
 XX the human gene SNPs shown in the specification

XX Sequence 21 BP; 5 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1167 GGGCTGCATCTTCATGAG 1185  
 |||||  
 Db 1 GGGCATCAGCTTCTATGAG 19

RESULT 834  
 AAH62348  
 ID AAH62348 standard; DNA; 21 BP.  
 XX  
 AC AAH62348;  
 DT 12-SEP-2001 (first entry)  
 XX  
 DE ATF3 polymorphism containing DNA fragment #249.  
 XX  
 KW Single nucleotide polymorphism; SNP; human; cancer; inflammation;  
 KW heart disease; paternity testing; forensic science; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT Variation replace(11,A)  
 FT /\*tag= a  
 FT /standard\_name= "single nucleotide polymorphism"

WO200138576-A2.

31-MAY-2001.

17-NOV-2000; 2000WO-US031639.

24-NOV-1999; 99US-0167334P.

(WHEED ) WHITEHEAD INST BIOMEDICAL RES.

Cargill M, Ireland JS, Lander ES;  
 WPI; 2001-367705/38.

New nucleic acid segments of the human genome, particularly from genes  
 including polymorphic sites, for phenotype correlation, forensics,  
 paternity testing, medicine and genetic analysis.

Claim 1; Page 49; 80pp; English.

DNA sequences AAH62100 - AAH62688 represent segments of human genes which  
 contain single nucleotide polymorphisms (SNPs). A method is included in  
 the invention for analysing a nucleic acid sample, which consists of  
 determining the base occupying any one of the polymorphic sites given in  
 the SNP containing sequences. The nucleotide sequences can be used in the  
 diagnosis or monitoring of diseases, such as cancer, inflammation, heart  
 diseases, diseases of the cardiovascular system, and infection by  
 microorganisms. The oligonucleotides are also useful in the manufacture  
 of a medicament for the treatment or prophylaxis of the diseases, and as  
 a pharmaceutical. SNP containing oligonucleotides are useful in  
 applications such as phenotype correlation, forensics, paternity testing,  
 medicine and genetic analysis

Sequence 21 BP; 3 A; 4 C; 11 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 39 GGCAGGAGGACCCAGCAGTG 57  
 |||||  
 Db 1 GGCAGGAGGAGGCGCTGCAGTG 19

RESULT 835  
 AAH62637  
 ID AAH62637 standard; DNA; 21 BP.

XX AAH62637;

DT 12-SEP-2001 (first entry)

```
XX Opiate receptor like 1 polymorphism containing DNA fragment #538.
DE
XX
XX Single nucleotide polymorphism; SNP; human; cancer; inflammation;
KW heart disease; paternity testing; forensic science; ds.
XX
XX Homo sapiens.
OS
XX Key Location/Qualifiers
FH replace(11,T)
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"
XX
XX WO200138576-A2.
PN
XX
XX 31-MAY-2001.
PD
XX
XX 17-NOV-2000; 2000WO-US031639.
PF
XX
XX 24-NOV-1999; 99US-0167334P.
PR
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA
XX Cargill M, Ireland JS, Lander ES;
PI
XX WPI; 2001-367705/38.
DR
XX New nucleic acid segments of the human genome, particularly from genes
PT including polymorphic sites, for phenotype correlation, forensics,
PT paternity testing, medicine and genetic analysis.
PT
XX Claim 1; Page 72; 80pp; English.
PS
XX
XX DNA sequences AAH62100 - AAH62688 represent segments of human genes which
CC contain single nucleotide polymorphisms (SNPs). A method is included in
CC the invention for analysing a nucleic acid sample, which consists of
CC determining the base occupying any one of the polymorphic sites given in
CC the SNP containing sequences. The nucleotide sequences can be used in the
CC diagnosis or monitoring of diseases, such as cancer, inflammation, heart
CC diseases, diseases of the cardiovascular system, and infection by
CC microorganisms. The oligonucleotides are also useful in the manufacture
CC of a medicament for the treatment or prophylaxis of the diseases, and as
CC a pharmaceutical. SNP containing oligonucleotides are useful in
CC applications such as phenotype correlation, forensics, paternity testing,
CC medicine and genetic analysis.
XX
XX Sequence 21 BP; 3 A; 6 C; 8 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 923 TGTTCACGCTGCTCCGTGG 941
DB 2 TGATCCGGCGCTCCGTGG 20
RESULT 836
AAF75649
ID AAF75649 standard; DNA; 21 BP.
AC
XX AAF75649;
XX
XX 10-MAY-2001 (first entry)
DT
XX Murine ztrypl coding sequence PCR primer ZC18.365.
DE
XX Mouse; ztrypl; serine protease; trypsin; inflammation; fertilisation;
KW cardiovascular disease; infertility; asthma; immune disorder; stroke;
KW gastrointestinal disorder; testicular function; contraceptive;
KW PCR primer; ss.
XX
XX Mus musculus.
OS
```

```
XX WO200112788-A2.
PN
XX
XX 22-FEB-2001.
PD
XX
XX 09-AUG-2000; 2000WO-US022156.
PF
XX
XX 18-AUG-1999; 99US-00376445.
PR
XX (ZYMO ) ZYMOGENETICS INC.
PA
XX Presnell SR, Taft DW;
XX
XX WPI; 2001-202859/20.
DR
XX
XX New mouse serine protease polypeptides ztrypl and polynucleotides, useful
PT for treating cardiovascular disease, infertility, impotence and other
PT male reproductive dysfunction.
PT
XX Example 1; Page 102; 112pp; English.
PS
XX The present invention provides the protein and coding sequences of the
CC human and murine serine protease ztrypl. This is a trypsin like protein
CC which is highly expressed in contractile tissues. The sequences can be
CC used in the treatment and identification of treatments for cardiovascular
CC disease, inflammation, infertility, male reproductive dysfunction,
CC asthma, stroke, immune disorders and gastrointestinal disorders. In
CC addition, they can be used to modulate testicular function and as
CC contraceptives.
XX
XX Sequence 21 BP; 1 A; 9 C; 4 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 7.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1195 GCGCGTCCCTCTTTCGG 1213
DB 2 GCGTGTCCCTCTTTCGTG 20
RESULT 837
AAF90246/c
ID AAF90246 standard; DNA; 21 BP.
AC
XX AAF90246;
XX
XX 06-AUG-2001 (first entry)
DT
XX PCR primer for UDP-glucose:aglycon-glucosyltransferase DNA probe.
DE
XX UDP-glucose:aglycon-glucosyltransferase; UDP-GAG; cyanohydrin; terpenoid;
KW glucose; transgenic plant; cyanogenic glucoside biosynthesis;
KW pathogen resistance; herbivore response; PCR primer; ss.
XX
XX Sorghum bicolor.
OS
XX WO200140491-A2.
PN
XX
XX 07-JUN-2001.
PD
XX
XX 29-NOV-2000; 2000WO-EP011982.
PF
XX
XX 01-DEC-1999; 99EP-00123838.
PR
XX (LUMI-) LUMINIS PTY LTD.
PA (UYRO-) UNIV ROYAL VETERINARY & AGRIC.
XX
XX Hoej P, Moeller BL, Jones PR;
PI
XX WPI; 2001-374846/39.
DR
XX
XX DNA molecule coding for UDP-glucose:aglycon-glucosyltransferase
PT
```

PT conjugating cyanohydrin, terpenoid or phenyl derivative to glucose, for  
PT producing transgenic plants having modified cyanogenic glucoside  
PT biosynthesis.  
XX  
XX  
PS Example 4; Page 17; 31pp; English.  
XX  
CC PCR primers AAF90246-47 were used to amplify a DNA probe for DNA encoding  
CC a UDP-glucose:aglycon-glucosyltransferase (UDP-GAG) polypeptide. The  
CC enzyme conjugates a cyanohydrin, terpenoid, phenyl derivative or  
CC hexanoid derivative to glucose. UDP-GAG polynucleotides are useful for  
CC producing transgenic plants having modified cyanogenic glucoside  
CC biosynthesis. Constitutive, inducible or tissue-specific expression of  
CC UDP-GAG is useful for obtaining transgenic cyanogenic plants with altered  
CC resistance to pathogens and herbivore responses  
XX  
XX Sequence 21 BP; 3 A; 5 C; 13 G; 0 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 552 GCCCTCAGCGCGGCTC 570  
Db 19 GCCCGCGCGCGTGCCTC 1  
RESULT 838  
AAF87687/C  
ID AAF87687 standard; DNA; 21 BP.  
XX  
AC AAF87687;  
XX  
DT 16-JUL-2001 (first entry)  
XX  
DE Human RecQ5 type DNA helicase sequencing primer 501.  
XX  
XX Human; RecQ5 alpha; RecQ5 beta; RecQ5 gamma; DNA helicase;  
KW alternative splicing; chromosomal instability; primer; ss.  
KW  
XX Homo sapiens.  
OS  
XX W0200125425-A1.  
PN  
PD 12-APR-2001.  
XX  
XX 25-AUG-2000; 2000WO-JP005757.  
PF  
XX 05-OCT-1999; 99JP-00284001.  
PR  
XX (AGEN-) AGENE RES INST CO LTD.  
PA  
XX Furuichi Y, Shimamoto A, Kitao S, Nishikawa K;  
PI WPI; 2001-273577/28.  
XX  
XX Polynucleotide encoding for RecQ5beta helicase useful for diagnosis and  
PT treatment of chromosomal instability.  
PT  
XX  
PS Example 2; Page 32; 97pp; Japanese.  
XX  
CC The present sequence is a primer used to sequence a polynucleotide  
CC encoding a human RecQ5 type DNA helicase. The three RecQ5 type helicases  
CC alpha, beta and gamma are formed by alternative splicing. The invention  
CC discloses the RecQ5 type DNA helicases beta and gamma, and the genes  
CC encoding them. The RecQ5 beta DNA helicase has a novel characteristic of  
CC being localised in the nucleus. It is useful as a diagnostic marker or in  
CC the treatment of diseases associated with chromosomal instability  
XX  
XX Sequence 21 BP; 6 A; 2 C; 9 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 823 AAGTCCCTCACCCTGTCT 841  
Db 20 AAGTGCCTCACCCCTTCT 2  
RESULT 839  
AAC86918/C  
ID AAC86918 standard; RNA; 21 BP.  
XX  
AC AAC86918;  
XX  
DT 02-APR-2001 (first entry)  
XX  
XX Critical sequence of a ribozyme targeting the oestrogen receptor.  
XX  
XX Ribozyme; oestrogen-dependent tumour; cell proliferation; glucocorticoid;  
KW DNA-binding domain; oestrogen receptor; cancer treatment; breast cancer;  
XX ss.  
XX Synthetic.  
OS  
XX W0200074485-A1.  
PN  
XX 14-DEC-2000.  
PD  
XX 02-JUN-2000; 2000WO-US015243.  
PF  
XX 04-JUN-1999; 99US-0137470P.  
PR  
XX (TEXA ) UNIV TEXAS.  
PA  
XX Roy AK, Lavrovsky Y, Tyagi RK, Song CS, Chatterjee B;  
PI WPI; 2001-061633/07.  
XX  
XX Ribozyme having a high substrate specificity for an mRNA encoding a DNA-  
PT binding domain of human estrogen receptor, useful for inhibiting estrogen  
PT -dependent tumor cell proliferation, particularly breast cancer.  
XX  
XX Claim 4; Page 6; 49pp; English.  
XX  
XX The specification describes a ribozyme capable of inhibiting oestrogen-  
CC dependent tumor cell proliferation and having a high substrate  
CC specificity for an mRNA sequence encoding a DNA-binding domain of human  
CC estrogen receptor. The ribozyme is free of endonuclease activity for an  
CC mRNA having a DNA binding domain of a glucocorticoid. The oestrogen  
CC receptor site-specific ribozymes are useful for cancer treatment and  
CC therapies, especially for inhibiting oestrogen-dependent tumour cell  
CC proliferation, particularly breast cancer. The present sequence represents  
CC the critical sequence of a ribozyme of the invention, which targets the  
CC the DNA binding domain of a human oestrogen receptor  
XX  
XX Sequence 21 BP; 7 A; 3 C; 8 G; 0 T; 3 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1571 ACTCAGCGAGCCAGCTTT 1589  
Db 19 ACTCAGCGACTCTGCTTT 1  
RESULT 840  
AAD09996/C  
ID AAD09996 standard; DNA; 21 BP.  
XX  
AC AAD09996;  
XX  
XX 12-SEP-2001 (first entry)  
DT  
XX Mus musculus goosecoid exon 2 DNA amplifying exon 2 forward PCR primer.  
DE



KW familial hypercholesterolaemia; polycystic kidney disease; cancer;  
KW hereditary spherocytosis; Von Willebrand's disease; tuberous sclerosis;  
KW hereditary haemorrhagic telangiectasia; familial colonic polyposis;  
KW Ehlers-Danlos syndrome; osteogenesis imperfecta; autoimmune disease;  
KW acute intermittent porphyria; inflammation; nervous system disorder;  
KW infection; rheumatoid arthritis; multiple sclerosis; diabetes;  
KW systemic lupus erythematosus; Graves disease; longevity; obesity;  
KW baldness; fertility; forensic; paternity testing; ss.  
XX  
OS Homo sapiens.  
XX  
XX US2002037508-A1.  
XX  
XX 28-MAR-2002.  
XX  
XX 18-JAN-2001; 2001US-00765081.  
XX  
XX 19-JAN-2000; 2000US-017861P.  
XX  
XX (CARG/) CARGILL M.  
XX (IREL/) IRELAND J S.  
XX (LAND/) LANDER E S.  
XX  
XX Cargill M, Ireland JS, Lander ES;  
XX  
XX WPI; 2002-315108/35.  
XX  
XX Nucleic acid comprising single nucleotide polymorphisms, useful in  
XX forensics, paternity testing and diagnosis of disease.  
XX  
XX Claim 1; Page 92; 96pp; English.  
XX  
XX The invention relates to a nucleic acid comprising single nucleotide  
XX polymorphisms (SNPs) associated with diseases. The nucleic acids  
XX comprising the SNPs and probes and primers for detecting them may be used  
XX in assays for the diagnosis of diseases associated with SNPs (such as  
XX sickle cell anaemia, agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan  
XX syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease,  
XX familial hypercholesterolaemia, polycystic kidney disease, hereditary  
XX spherocytosis, Von Willebrand's disease, tuberous sclerosis, hereditary  
XX haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos  
XX syndrome, osteogenesis imperfecta, and acute intermittent porphyria,  
XX symptoms of, or susceptibility to, multifactorial diseases of which a  
XX component is or may be genetic, such as autoimmune diseases,  
XX inflammation, cancer, diseases of the nervous system, and infection by  
XX pathogenic microorganisms, autoimmune diseases including rheumatoid  
XX arthritis, multiple sclerosis, diabetes (insulin-dependent and non-  
XX independent), systemic lupus erythematosus and Graves disease, cancers  
XX including cancers of the bladder, brain, breast, colon, oesophagus,  
XX kidney, leukaemia, liver, lung, oral cavity, ovary, pancreas, prostate,  
XX skin, stomach and uterus, longevity, appearance (e.g., baldness,  
XX obesity), strength, speed, endurance, fertility, and susceptibility or  
XX receptivity to particular drugs or therapeutic treatments), in forensics  
XX and in paternity testing. ABK6581-ABK6584 represent human single  
XX nucleotide polymorphisms of the invention  
XX  
XX Sequence 21 BP; 6 A; 5 C; 7 G; 2 T; 0 U; 1 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 76.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 1; Mismatches 4; Indels 0; Gaps 0;  
Qy 201 TGCCCTTGACAGATAGGCT 221  
Db 21 TGCCCTTGAGTCTATGCTCT 1  
RESULT 843  
ABK40345  
ID ABK40345 standard; DNA; 21 BP.  
XX  
AC ABK40345;  
XX

DT 15-JUL-2002 (first entry)  
DE Forward PCR primer for human PRO4316 DNA.  
XX  
XX Human; PRO; benign tumour; malignant tumour; lymphoid malignancy;  
KW leukaemia; neuronal disorder; stromal disorder; blastocoele disorder;  
KW inflammatory disorder; immune disorder; angiogenic disorder; cytostatic;  
KW neuroprotective; PCR; primer; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO200153486-A1.  
XX  
XX 26-JUL-2001.  
XX  
XX 11-FEB-2000; 2000WO-US003565.  
XX  
XX 08-MAR-1999; 99WO-US005028.  
XX 11-MAR-1999; 99US-0123972P.  
XX 11-MAY-1999; 99US-0133459P.  
XX 02-JUN-1999; 99WO-US012252.  
XX 22-JUN-1999; 99US-0140650P.  
XX 22-JUN-1999; 99US-0140653P.  
XX 26-JUL-1999; 99US-0144758P.  
XX 26-JUL-1999; 99US-0145688P.  
XX 17-AUG-1999; 99US-0146222P.  
XX 17-AUG-1999; 99US-0149395P.  
XX 31-AUG-1999; 99US-0151689P.  
XX 01-SEP-1999; 99WO-US020111.  
XX 15-SEP-1999; 99WO-US021090.  
XX 30-NOV-1999; 99WO-US028313.  
XX 01-DEC-1999; 99WO-US028301.  
XX 01-DEC-1999; 99WO-US028634.  
XX 05-JAN-2000; 2000WO-US000219.  
XX  
XX (GETH ) GENENTECH INC.  
XX  
XX Ashkenazi AJ, Goddard A, Godowski PJ, Gurney AL, Hillan KJ;  
XX Marsters SA, Pan J, Pitti RM, Roy MA, Smith V, Stone DM;  
XX Watanabe CK, Wood WI;  
XX WPI; 2002-205567/26.  
XX  
XX Thirty five nucleic acids encoding PRO polypeptides, useful for treating  
XX benign or malignant tumors, leukemias and lymphoid malignancies,  
XX inflammatory, angiogenic and immunologic disorders.  
XX  
XX Example 24; Page 136; 302pp; English.  
XX  
XX The present invention relates to the isolation of novel human PRO  
XX polypeptides (AAU86128-AAU86162) and the polynucleotide sequences  
XX encoding them. The PRO polypeptides, agonists, antagonists or anti-PRO  
XX antibodies are useful for treating benign or malignant tumours (e.g.  
XX renal, kidney, bladder, breast, etc), leukemias and lymphoid  
XX malignancies, other disorders such as neuronal, glial, astrocytal,  
XX hypothalamic, glandular, macrophagal, stromal and blastocoele disorders,  
XX inflammatory, immune and angiogenic disorders. The polynucleotide  
XX sequences are also useful in gene therapy. The present sequence  
XX represents a PCR primer used in the methods of the present invention  
XX  
XX Sequence 21 BP; 6 A; 5 C; 8 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Qy 507 GGGCTACTCTGGAGAGCTG 525  
Db 2 GGACGACGAGGAGAGCTG 20  
RESULT 844  
ABS60153/c





PS Disclosure; Page 722; 977pp; English.

XX The invention relates to an isolated nucleic acid from a human gene  
 CC encoding aminopeptidase P (XPNEP2), bradykinin receptor B1 (BDKRB1),  
 CC tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein  
 CC 1 (KUK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme  
 CC 2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one  
 CC polymorphic position. Also included are (1) a probe that hybridises to a  
 CC polymorphic position as provided in the detailed summary of single  
 CC nucleotide polymorphisms comprising additional 5' and 3' flanking genomic  
 CC sequence; (2) analysing (M1) at least one nucleic acid sample comprising  
 CC obtaining the sample from one or more individuals and determining the  
 CC nucleic acid sequence at one or more polymorphic positions in a gene  
 CC encoding a protein selected from the group above; (3) constructing (M2)  
 CC haplotypes using the genes comprising grouping at least two nucleic acids  
 CC ; (4) identifying (M3) an individual at risk of developing a disorder  
 CC upon administration of an ACE inhibitor and/or vasopeptidase inhibitor  
 CC using the polymorphic data; (5) a library of nucleic acids, each of which  
 CC comprises one or more polymorphic positions within a gene encoding a  
 CC human protein selected from the group above; and (6) genotyping (M4) an  
 CC individual comprising obtaining a nucleic acid sample, determining the  
 CC nucleotide present in at least one polymorphic position, and comparing at  
 CC least one position with a known data set. The genes, (M1, M2, M3 and M4)  
 CC and compositions are useful for detecting, diagnosing, treating,  
 CC preventing various disorders such as angioedema and diseases which  
 CC involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's  
 CC disease, trachomas, and cardiovascular diseases like angina pectoris,  
 CC hypertension, heart failure, myocardial infarction, ventricular  
 CC hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary  
 CC artery disease, arteriosclerosis and/or atherosclerosis, and  
 CC hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory  
 CC obstructive pulmonary disease (COPD) and enterocolitis (many other  
 CC diseases and disorders are listed in the specification). The  
 CC polynucleotides are also useful for chromosome identification. Antibodies  
 CC against the proteins may be utilised for immunophenotyping of cell lines  
 CC and biological samples. The present sequence is included in the sequence  
 CC listing but is not referred to anywhere else in the specification  
 XX

SQ Sequence 21 BP; 5 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1537 AAGGAGCCAGCCTTCGGT 1555

DB 2 AAGGTGGACAGCTCTTCGGT 20

RESULT 846

ABS60249

ID ABS60249 standard; DNA; 21 BP.

AC ABS60249;

DT 05-NOV-2002 (first entry)

DE Human polymorphism associated DNA sequence #143.

XX Aminopeptidase P; XPNEP2; bradykinin receptor B1; ds; BDKRB1;  
 KW tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH; kallikrein 1;  
 KW KUK1; bradykinin receptor B2; BDKRB2; gene therapy;  
 KW angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;  
 KW polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;  
 KW cardiovascular disease; angina pectoris; hypertension; heart failure;  
 KW myocardial infarction; ventricular hypertrophy; vascular disease;  
 KW aneurysm; embolism; thrombosis; coronary artery disease; angioedema;  
 KW arteriosclerosis; atherosclerosis; hypersensitivity; sepsis;  
 KW autoimmune disease; inflammatory arthritis; cancer; wound;  
 KW viral infection; bacterial infection; fungal infection; COPD;  
 KW Chronic obstructive pulmonary disease; enterocolitis.

OS Homo sapiens.

PN WO200261131-A2.

PD 08-AUG-2002.

XX 03-DEC-2001; 2001WO-US047235.

XX 04-DEC-2000; 2000US-0251015P.

PR 23-JAN-2001; 2001US-0263678P.

PR 02-MAR-2001; 2001US-0273037P.

XX (BRIM ) BRISTOL-MYERS SQUIBB CO.

PA (TSUC/) TSUCHIHASHI Z.

PA (HUII/) HUI L.

PI Tsuchihashi Z, Hui L, Zerba KE, Ma-Edmonds M, Perrone MH;

PI Swanson BN, Powell JR;

XX WPI; 2002-619265/66.

XX New isolated nucleic acid with at least one polymorphic position, useful

PT for detecting, diagnosing and treating disorders such as angioedema,

PT cancer, viral, bacterial or fungal infection, cardiovascular and

PT autoimmune diseases.

XX Disclosure; Page 721; 977pp; English.

XX The invention relates to an isolated nucleic acid from a human gene  
 CC encoding aminopeptidase P (XPNEP2), bradykinin receptor B1 (BDKRB1),  
 CC tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein  
 CC 1 (KUK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme  
 CC 2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one  
 CC polymorphic position. Also included are (1) a probe that hybridises to a  
 CC polymorphic position as provided in the detailed summary of single  
 CC nucleotide polymorphisms comprising additional 5' and 3' flanking genomic  
 CC sequence; (2) analysing (M1) at least one nucleic acid sample comprising  
 CC obtaining the sample from one or more individuals and determining the  
 CC nucleic acid sequence at one or more polymorphic positions in a gene  
 CC encoding a protein selected from the group above; (3) constructing (M2)  
 CC haplotypes using the genes comprising grouping at least two nucleic acids  
 CC ; (4) identifying (M3) an individual at risk of developing a disorder  
 CC upon administration of an ACE inhibitor and/or vasopeptidase inhibitor  
 CC using the polymorphic data; (5) a library of nucleic acids, each of which  
 CC comprises one or more polymorphic positions within a gene encoding a  
 CC human protein selected from the group above; and (6) genotyping (M4) an  
 CC individual comprising obtaining a nucleic acid sample, determining the  
 CC nucleotide present in at least one polymorphic position, and comparing at  
 CC least one position with a known data set. The genes, (M1, M2, M3 and M4)  
 CC and compositions are useful for detecting, diagnosing, treating,  
 CC preventing various disorders such as angioedema and diseases which  
 CC involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's  
 CC disease, trachomas, and cardiovascular diseases like angina pectoris,  
 CC hypertension, heart failure, myocardial infarction, ventricular  
 CC hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary  
 CC artery disease, arteriosclerosis and/or atherosclerosis, and  
 CC hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory  
 CC arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic  
 CC obstructive pulmonary disease (COPD) and enterocolitis (many other  
 CC diseases and disorders are listed in the specification). The  
 CC polynucleotides are also useful for chromosome identification. Antibodies  
 CC against the proteins may be utilised for immunophenotyping of cell lines  
 CC and biological samples. The present sequence is included in the sequence  
 CC listing but is not referred to anywhere else in the specification  
 XX

SQ Sequence 21 BP; 5 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 7.6e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1537 AAGGAGCCAGCCTTCGGT 1555

||||| ||||| ||||| ||||| |||||

Db 2 AAGGTGGACAGCTTCGGT 20

RESULT 847

ABS60767/c

ID ABS60767 standard; DNA; 21 BP.

XX AC ABS60767;

XX DT 05-NOV-2002 (first entry)

XX DE Human polymorphism associated DNA sequence #404.

XX KW Amino peptidase P; XNPEP2; bradykinin receptor B1; ds; BDKRB1;

XX KW tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH; kallikrein 1;

XX KW KLK1; bradykinin receptor B2; BDKRB2; gene therapy;

XX KW angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;

XX KW polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;

XX KW cardiovascular disease; angina pectoris; hypertension; heart failure;

XX KW myocardial infarction; ventricular hypertrophy; vascular disease;

XX KW aneurysm; embolism; thrombosis; coronary artery disease; angiodema;

XX KW arteriosclerosis; atherosclerosis; hypersensitivity; sepsis;

XX KW autoimmune disease; inflammatory arthritis; cancer; wound;

XX KW viral infection; bacterial infection; fungal infection; COPD;

XX KW Chronic obstructive pulmonary disease; enterocolitis.

XX OS Homo sapiens.

XX FN WO200261131-A2.

XX PD 08-AUG-2002.

XX PF 03-DEC-2001; 2001WO-US047235.

XX PR 04-DEC-2000; 2000US-025101SP.

XX PR 23-JAN-2001; 2001US-0263678P.

XX PR 02-MAR-2001; 2001US-0273037P.

XX PA (BRIM ) BRISTOL-MYERS SQUIBB CO.

XX PA (TSUC/) TSUCHIHASHI Z.

XX PA (HUI/) HUI L.

XX TSUCHIHASHI Z, Hui L, Zerba KB, Ma-Edmonds M, Perrone MH;

XX PI Swanson BN, Powell JR;

XX PI WPI; 2002-619265/66.

XX DR New isolated nucleic acid with at least one polymorphic position, useful

XX PT for detecting, diagnosing and treating disorders such as angiodema,

XX PT cancer, viral, bacterial or fungal infection, cardiovascular and

XX PT autoimmune diseases.

XX PS Disclosure; Page 876; 977pp; English.

XX CC The invention relates to an isolated nucleic acid from a human gene

XX CC encoding aminopeptidase P (XNPEP2), bradykinin receptor B1 (BDKRB1),

XX CC tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein

XX CC 1 (KLK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme

XX CC 2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one

XX CC polymorphic position. Also included are (1) a probe that hybridises to a

XX CC polymorphic position as provided in the detailed summary of single

XX CC nucleotide polymorphisms comprising additional 5' and 3' flanking genomic

XX CC sequence; (2) analysing (M1) at least one nucleic acid sample comprising

XX CC obtaining the sample from one or more individuals and determining the

XX CC nucleic acid sequence at one or more polymorphic positions in a gene

XX CC encoding a protein selected from the group above; (3) constructing (M2)

XX CC haplotypes using the genes comprising grouping at least two nucleic acids

XX CC ; (4) identifying (M3) an individual at risk of developing a disorder

XX CC upon administration of an ACE inhibitor and/or vasopressinase inhibitor

XX CC using the polymorphic data; (5) a library of nucleic acids, each of which

XX CC comprises one or more polymorphic positions within a gene encoding a

XX CC human protein selected from the group above; and (6) genotyping (M4) an

XX CC individual comprising obtaining a nucleic acid sample, determining the

CC nucleotide present in at least one polymorphic position, and comparing at

CC least one position with a known data set. The genes, (M1, M2, M3 and M4)

CC and compositions are useful for detecting, diagnosing, treating,

CC preventing various disorders such as angiodema and diseases which

CC involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's

CC disease, trachomas, and cardiovascular diseases like angina pectoris,

CC hypertension, heart failure, myocardial infarction, ventricular

CC hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary

CC artery disease, arteriosclerosis and/or atherosclerosis, and

CC hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory

CC arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic

CC obstructive pulmonary disease (COPD) and enterocolitis (many other

CC diseases and disorders are listed in the specification). The

CC polymucleotides are also useful for chromosome identification. Antibodies

CC against the proteins may be utilised for immunophenotyping of cell lines

CC and biological samples. The present sequence is included in the sequence

CC listing but is not referred to anywhere else in the specification

XX

SQ Sequence 21 BP; 7 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.88; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 7.6e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1246 TTCGTCATCTTAGGACCC 1264

|||||

DB 21 TTCAGTGTCTTGGACCC 3

RESULT 848

ABQ61245

ID ABQ61245 standard; DNA; 21 BP.

XX AC ABQ61245;

XX DT 03-OCT-2002 (first entry)

XX DE Human aquaporin 5 (AQP5) gene PCR primer 3.

XX KW Human; ss; PCR; primer; aquaporin; AQP5; AQP; water channel protein;

XX KW oligonucleotide chip; CGN chip; cDNA chip; lung cancer;

XX KW mutation detection; polymorphism detection; gene expression.

XX OS Homo sapiens.

XX PN WO200220787-A1.

XX PD 14-MAR-2002.

XX PF 10-SEP-2001; 2001WO-KR001528.

XX PR 09-SEP-2000; 2000KR-00053821.

XX PA (GOOD-) GOODGENE INC.

XX PA (MOON/) MOON W.

XX PA (MOON/) MOON C.

XX PI Moon W, Moon C, Moon Y, Kim B, Kim D, Shin C, Um T, Kim H;

XX PI Song M, Kim H, Song S;

XX DR WPI; 2002-393847/42.

XX PT Novel aquaporin 5 gene mutant useful for diagnosing lung, stomach, colon,

XX PT prostate, or head or neck cancer.

XX PS Example 2; Page 148; 154pp; English.

XX CC The invention comprises a mutant form of the human aquaporin 5 (AQP5)

XX CC gene. Aquaporin (AQP) is a family of water channel proteins, through

XX CC which water is transported into and out of cells - ten types of mammalian

XX CC AQP have been identified so far. The invention also comprises an

XX CC oligonucleotide (OGN) chip having 902 oligonucleotide primer sequences

XX CC and a cDNA chip comprising one or more sequences from the human AQP5

CC gene. The mutant AQP5 gene is useful for diagnosing cancer (i.e lung  
CC cancer). The OGN chip is useful for detecting mutations and polymorphisms  
CC in AQP5 and the cDNA chip is useful for analysis of gene expression. The  
CC present DNA sequence represents a human aquaporin (AQP) gene PCR primer  
XX  
SQ Sequence 21 BP; 3 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1036 TTGGCCTGGCCGAGCA 1054  
|||||

Db 3 TTGGCCTGGCCATAGCA 21  
|||||

RESULT 849  
ABQ61241  
ID ABQ61241 standard; DNA; 21 BP.  
AC  
AC ABQ61241;  
XX  
XX 03-OCT-2002 (first entry)  
DT Human aquaporin 5 (AQP5) gene PCR primer 1.  
DE  
DE Human; ss; PCR; primer; aquaporin; AQP5; AQP; water channel protein;  
KW oligonucleotide chip; OGN chip; cDNA chip; lung cancer;  
KW mutation detection; polymorphism detection; gene expression.  
XX  
XX Homo sapiens.  
OS  
XX Moon W, Moon C, Moon Y, Kim B, Kim D, Shin C, Um T, Kim H;  
XX Song M, Kim H, Song S;  
XX WPI; 2002-393847/42.  
XX WO200220787-A1.  
XX 14-MAR-2002.  
XX 10-SEP-2001; 2001WO-KR001528.  
XX 09-SEP-2000; 2000KR-00053821.  
XX (GOOD-) GOODGENE INC.  
XX (MOON/) MOON W.  
XX (MOON/) MOON C.  
XX Moon W, Moon C, Moon Y, Kim B, Kim D, Shin C, Um T, Kim H;  
XX Song M, Kim H, Song S;  
XX WPI; 2002-393847/42.  
XX Novel aquaporin 5 gene mutant useful for diagnosing lung, stomach, colon,  
XX prostate, or head or neck cancer.  
XX Example 1; Page 146; 154pp; English.  
XX The invention comprises a mutant form of the human aquaporin 5 (AQP5)  
XX gene. Aquaporin (AQP) is a family of water channel proteins, through  
XX which water is transported into and out of cells - ten types of mammalian  
XX AQP have been identified so far. The invention also comprises an  
XX oligonucleotide (OGN) chip having 902 oligonucleotide primer sequences  
XX and a cDNA chip comprising one or more sequences from the human AQP5  
XX gene. The mutant AQP5 gene is useful for diagnosing cancer (i.e lung  
XX cancer). The OGN chip is useful for detecting mutations and polymorphisms  
XX in AQP5 and the cDNA chip is useful for analysis of gene expression. The  
XX present DNA sequence represents a human aquaporin (AQP) gene PCR primer  
XX Sequence 21 BP; 3 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1036 TTGGCCTGGCCGAGCA 1054  
|||||

Db 3 TTGGCCTGGCCATAGCA 21  
|||||

RESULT 850  
ABQ61247  
ID ABQ61247 standard; DNA; 21 BP.  
XX  
XX ABQ61247;  
AC  
XX 03-OCT-2002 (first entry)  
DT Human aquaporin 5 (AQP5) gene PCR primer 5.  
DE  
DE Human; ss; PCR; primer; aquaporin; AQP5; AQP; water channel protein;  
KW oligonucleotide chip; OGN chip; cDNA chip; lung cancer;  
KW mutation detection; polymorphism detection; gene expression.  
XX  
XX Homo sapiens.  
OS  
XX Moon W, Moon C, Moon Y, Kim B, Kim D, Shin C, Um T, Kim H;  
XX Song M, Kim H, Song S;  
XX WPI; 2002-393847/42.  
XX Novel aquaporin 5 gene mutant useful for diagnosing lung, stomach, colon,  
XX prostate, or head or neck cancer.  
XX Disclosure; Page 148; 154pp; English.  
XX The invention comprises a mutant form of the human aquaporin 5 (AQP5)  
XX gene. Aquaporin (AQP) is a family of water channel proteins, through  
XX which water is transported into and out of cells - ten types of mammalian  
XX AQP have been identified so far. The invention also comprises an  
XX oligonucleotide (OGN) chip having 902 oligonucleotide primer sequences  
XX and a cDNA chip comprising one or more sequences from the human AQP5  
XX gene. The mutant AQP5 gene is useful for diagnosing cancer (i.e lung  
XX cancer). The OGN chip is useful for detecting mutations and polymorphisms  
XX in AQP5 and the cDNA chip is useful for analysis of gene expression. The  
XX present DNA sequence represents a human aquaporin (AQP) gene PCR primer  
XX Sequence 21 BP; 3 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1036 TTGGCCTGGCCGAGCA 1054  
|||||

Db 3 TTGGCCTGGCCATAGCA 21  
|||||

RESULT 851  
ABL43257  
ID ABL43257 standard; DNA; 21 BP.  
XX  
XX ABL43257;  
AC  
XX 11-APR-2002 (first entry)  
DT Human chromosome 1p36-35 PCR primer SEQ ID NO:301.  
DE  
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:301.  
XX

KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;  
XX PCR primer; ss.  
KW Homo sapiens.  
OS JP2001321190-A.  
PN 20-NOV-2001.  
XX 12-MAR-2001; 2001JP-00068285.  
XX 10-MAR-2000; 2000JP-00066716.  
PR (RIKA) RIKAGAKU KENKYUSHO.  
XX (GENO-) GENOTEX YG.  
XX WPI; 2002-144136/19.  
XX Arraying genome clones.  
XX Claim 4; Page 10; 528pp; Japanese.  
XX The present invention describes a method of arraying genome clones. The  
CC method comprises: (a) clones of the genomic libraries contained in  
CC multiwell plates numbered for discrimination are mixed in each of the  
CC multiwell plates; (b) a primer designed based on the chromosome marker  
CC sequence is added to the mixture to carry out an amplification reaction;  
CC (c) a signal corresponding to the marker is detected from the resultant  
CC amplified product to specify the discrimination Nos. of the multiwell  
CC plates containing the clones having said marker sequence; (d) the order  
CC of the markers is changed so that the same discrimination Nos. succeed to  
CC the maximum in the specified discrimination Nos. to array the multiwell  
CC plates; (e) the clones in the multiwell plates of the specified  
CC discrimination Nos. are mixed respectively in each wells of longitudinal  
CC and lateral directions; (f) the mixed clones are cultured and the  
CC resultant cultures are amplified by using the above primer; (g) signals  
CC are detected from the amplified products; (h) the clones in the multiwell  
CC plates are specified from the detected result; and (i) the clones are  
CC reconstituted as the positions on the chromosome and arrayed. The  
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent  
CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634  
CC represent PCR primers for human chromosome 21q22.1, which are  
CC specifically claimed for use in the present invention  
XX  
SQ Sequence 21 BP; 7 A; 5 C; 4 G; 5 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 597 CTTTGGGAACTGGAGACC 615  
DB 3 CATTGAGAACTGGAGACC 21  
RESULT 852  
ABN88844  
ID ABN88844 standard; RNA; 21 BP.  
AC ABN88844;  
XX  
XX 21-AUG-2002 (first entry)  
XX Rat metallothionein MT-II target sequence SEQ ID NO:47.  
XX Apoptosis-inducing ribozyme; hammerhead ribozyme; ribozyme; MT;  
KW metallothionein; cancer; tumour; ss.  
XX Rattus sp.  
XX WO200236740-A2.  
XX 10-MAY-2002.  
XX

XX 31-OCT-2001; 2001WO-US046062.  
XX 31-OCT-2000; 2000US-0244709P.  
XX (UTMA-) UNIV MASSACHUSETTS MEDICAL CENT.  
XX Lee K, Lau K, Ho S;  
XX WPI; 2002-479757/51.  
XX New ribozymes directed against metallothionein mRNAs, useful for inducing  
PT apoptosis in human cancer cells, for inhibiting tumor growth and for  
PT enhancing the effectiveness of chemotherapy or radiation therapy against  
PT cancer cells.  
XX Example 2; Fig 2B; 63pp; English.  
XX The present invention describes a ribozyme comprising Hu MT-Ta Rz, Hu MT-  
CC ie/r Rz, Hu MT-If Rz, Hu MT-Ib Rz, Hu MT-Ighlx/-II Rz, Rz1-2, or Rz4-9  
CC (see ABN88812 to ABN88818). The ribozymes have cytostatic activity. The  
CC ribozymes are targeted to metallothionein (MT) and so are metallothionein  
CC inhibitors and apoptosis inducers. The ribozymes are useful for inducing  
CC apoptosis in human cancer cells, for inhibiting tumor growth, and for  
CC enhancing the effectiveness of chemotherapy or radiation therapy against  
CC cancer cells. The ribozyme-based methods for treating cancer, from the  
CC present invention, offer the following advantages over conventional  
CC antisense-based methods of limiting metallothionein production in target  
CC cells: (1) ribozymes destroy metallothionein-encoding mRNAs rather than  
CC merely hybridizing them; (2) ribozymes act like enzymes and each molecule  
CC can be recycled to degrade multiple mRNA molecules; (3) a ribozyme need  
CC not have perfect complementarity with a target mRNA to destroy the RNA;  
CC and (4) a single ribozyme can be designed to destroy several related  
CC mRNAs that encode different metallothioneins more readily than a  
CC conventional antisense molecule can be designed to be effective against  
CC various mRNAs. ABN88819 to ABN88870 represent sequences used in the  
CC exemplification of the present invention  
XX  
SQ Sequence 21 BP; 6 A; 4 C; 8 G; 0 T; 3 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 68.4%; Pred. No. 7.6e+02;  
Matches 13; Conservative 3; Mismatches 3; Indels 0; Gaps 0;  
QY 1167 GGGCTGCATCTCTATGAG 1185  
DB 2 GGGCUGCAUCUGCAAGAG 20  
RESULT 853  
ABN97586/c  
ID ABN97586 standard; DNA; 21 BP.  
XX AC ABN97586;  
XX 23-DEC-2002 (first entry)  
XX Human epoxide hydrolase 2 polymorphic sequence #77.  
XX Human; ds; cytochrome P450 A1; CYP450A1; UGT2B4; MDR1;  
KW cytochrome P450 A2; CYP450A2; cytochrome P450 02E; CYP45002E1; LTF;  
KW adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR112;  
KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;  
KW cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological;  
KW epoxide hydrolase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;  
KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;  
KW HMMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;  
KW NADPH quinone oxidoreductase 2; NQO2; sulcatransferase thermolabile; STM;  
KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;  
KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; UPA;  
KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;  
KW multidrug resistance associated protein 3; cancer; prostate;  
KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;  
KW

KW altered drug metabolism; cardiovascular function; colorectal tumour;  
KW central nervous system; pulmonary; immunological; SNP;  
XX single nucleotide polymorphism.  
OS Homo sapiens.  
XX WO200257410-A2.  
XX 25-JUL-2002.  
XX 28-NOV-2001; 2001WO-US044838.  
XX 28-NOV-2000; 2000US-00724389.  
XX (DNAS-) DNA SCI LAB INC.  
XX Guida M, Hall J;  
XX WPI; 2002-698522/75.  
XX Isolated nucleic acid molecules having polymorphisms in known human genes  
PT e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers  
PT for locating, identifying and characterizing the genes responsible for  
PT disorder-related traits.  
XX Example 10; Page 119; 714pp; English.  
XX This invention relates to the sequence of an isolated nucleic acid  
CC molecule comprising at least one base variation from that of a known  
CC human cytochrome P450 A1 (CYP450A1), cytochrome P450 A2 (CYP450A2),  
CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1),  
CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator  
CC (ARNT), cathepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding  
CC inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating  
CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl  
CC transferase (HNMT), kallikrein 2) KLK2, nicotinamide -N-methyl  
CC sulfoltransferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),  
CC sulfoltransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4  
CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl  
CC transferase (UGT2B15), urokinase receptor (UPA), multidrug resistance 1  
CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3  
CC (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic  
CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.  
CC The polymorphisms in the human genes cited in the invention are useful as  
CC genetic linkage markers for locating and characterizing the genes that  
CC are responsible for specific traits within the genome and eventually  
CC identifying the genes responsible for a variety of disorder-related  
CC traits as a result of their e.g., overexpression, constitutive  
CC expression, mutation or underexpression, which may be used in diagnosing  
CC and/or treating the disorders. The nucleic acid molecules comprising the  
CC polymorphic sequences contained in CYP450A1, CYP450A2, CYP4502E1,  
CC AHR, EPHX2, GST12, NNMT, NQO2, NR1I2, STM, UGT2B4, UGT2B7, UGT2B15, AHR,  
CC MDR1 and/or MDR3 are useful for screening individuals for altered drug  
CC metabolism. The polymorphic sequences contained in CYP450A1, CYP450A2,  
CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for  
CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are  
CC used to screen for altered cardiovascular function, in COX2 for altered  
CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central  
CC nervous system function, in FLAP and HNMT for altered pulmonary,  
CC immunological or haematological function, in KLK2 for altered serine  
CC protease activity in the prostate, in LTF for altered immunological or  
CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central  
CC peripheral nervous system function. The present sequence represents a  
CC polymorphic DNA sequence of the invention  
XX  
SQ Sequence 21 BP; 3 A; 9 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1644 GCTGGAGGATGGCACACC 1662

DB 21 GGTGGAGGATGGCACACC 3  
RESULT 854  
ABS97587/c  
ID ABS97587 standard; DNA; 21 BP.  
XX  
XX ABS97587;  
AC  
XX 23-DEC-2002 (first entry)  
DT  
XX Human epoxide hydroxylase 2 polymorphic sequence #78.  
DE  
XX Human; ds; cytochrome P450 A1; CYP450A1A1; UGT2B4; MDR1;  
KW cytochrome P450 A2; CYP450A2; cytochrome P450 02E; CYP45002E1; LTF;  
KW adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR1I2;  
KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;  
KW cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological;  
KW epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;  
KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;  
KW HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;  
KW NADPH quinone oxidoreductase 2; NQO2; sulfoltransferase thermolabile; STM;  
KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;  
KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; UPA;  
KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;  
KW multidrug resistance associated protein 3; cancer; prostate;  
KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;  
KW central nervous system; pulmonary; immunological; SNP;  
KW single nucleotide polymorphism.  
OS Homo sapiens.  
XX WO200257410-A2.  
XX 25-JUL-2002.  
XX 28-NOV-2001; 2001WO-US044838.  
XX 28-NOV-2000; 2000US-00724389.  
XX (DNAS-) DNA SCI LAB INC.  
XX Guida M, Hall J;  
XX WPI; 2002-698522/75.  
XX Isolated nucleic acid molecules having polymorphisms in known human genes  
PT e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers  
PT for locating, identifying and characterizing the genes responsible for  
PT disorder-related traits.  
XX Example 10; Page 119; 714pp; English.  
XX This invention relates to the sequence of an isolated nucleic acid  
CC molecule comprising at least one base variation from that of a known  
CC human cytochrome P450 A1 (CYP450A1), cytochrome P450 A2 (CYP450A2),  
CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1),  
CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator  
CC (ARNT), cathepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding  
CC inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating  
CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl  
CC transferase (HNMT), NADPH quinone oxidoreductase 2 (NQO2),  
CC sulfoltransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4  
CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl  
CC transferase (UGT2B15), urokinase receptor (UPA), multidrug resistance 1  
CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3  
CC (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic  
CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.  
CC The polymorphisms in the human genes cited in the invention are useful as  
CC genetic linkage markers for locating and characterizing the genes that  
CC are responsible for specific traits within the genome and eventually  
CC identifying the genes responsible for a variety of disorder-related  
CC traits as a result of their e.g., overexpression, constitutive  
CC expression, mutation or underexpression, which may be used in diagnosing  
CC and/or treating the disorders. The nucleic acid molecules comprising the  
CC polymorphic sequences contained in CYP450A1, CYP450A2, CYP4502E1,  
CC AHR, EPHX2, GST12, NNMT, NQO2, NR1I2, STM, UGT2B4, UGT2B7, UGT2B15, AHR,  
CC MDR1 and/or MDR3 are useful for screening individuals for altered drug  
CC metabolism. The polymorphic sequences contained in CYP450A1, CYP450A2,  
CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for  
CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are  
CC used to screen for altered cardiovascular function, in COX2 for altered  
CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central  
CC nervous system function, in FLAP and HNMT for altered pulmonary,  
CC immunological or haematological function, in KLK2 for altered serine  
CC protease activity in the prostate, in LTF for altered immunological or  
CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central  
CC peripheral nervous system function. The present sequence represents a  
CC polymorphic DNA sequence of the invention  
XX  
SQ Sequence 21 BP; 3 A; 9 C; 4 G; 5 T; 0 U; 0 Other;

CC identifying the genes responsible for a variety of disorder-related  
 CC traits as a result of their e.g., overexpression, constitutive  
 CC expression, mutation or underexpression, which may be used in diagnosing  
 CC and/or treating the disorders. The nucleic acid molecules comprising the  
 CC polymorphic sequences contained in CYP450A1, CYP450A2, CYP450A3, AHR,  
 CC ARNT, EPHX2, GSTI2, NNMT, NQO2, NR1I2, STW, UGT2B4, UGT2B7, UGT2B15, AHR,  
 CC MDR1 and/or MDR3 are useful for screening individuals for altered drug  
 CC metabolism. The polymorphic sequences contained in CYP450A1, CYP450A2,  
 CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for  
 CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are  
 CC used to screen for altered cardiovascular function, in COX2 for altered  
 CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central  
 CC nervous system function, in FLAP and HNNMT for altered pulmonary,  
 CC immunological or haematological function, in KIK2 for altered serine  
 CC protease activity in the prostate, in LTF for altered immunological or  
 CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and  
 CC peripheral nervous system function. The present sequence represents a  
 CC polymorphic DNA sequence of the invention  
 XX Sequence 21 BP; 3 A; 9 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1644 GCTGGAGGGATGCCACACC 1662  
 DB 21 GGTGGAGGATGGCACACC 3

RESULT 855  
 ABK16378  
 ID ABK16378 standard; DNA; 21 BP.  
 AC ABK16378;  
 XX  
 DT 14-MAR-2002 (first entry)  
 XX Human adipose protein, adp, PCR primer #8.  
 DE Adipose protein; ss; adp; obesity; transgenic animal; obesity;  
 KW adipositas; bulimia; wasting; cachexia; eating disorder;  
 KW body weight disorder; weight loss; cancer; infectious disease;  
 KW hypogonadism; Prader-Willi syndrome; Laurence-Moon-Biedl syndrome;  
 KW hypothyroidism; diabetes; Cushing's syndrome; endocrine disorder;  
 KW gastrointestinal diseases; inflammatory bowel disease; PCR primer;  
 KW ulcerative colitis; anorexia nervosa; glycogen storage disease;  
 KW lipid storage disease; lipoma; liposarcoma; heart disease; hypertension;  
 KW infertility; acquired immunodeficiency syndrome; AIDS.  
 XX Homo sapiens.  
 OS  
 XX WO200196371-A2.  
 PN  
 XX 20-DEC-2001.  
 PD  
 XX 13-JUN-2001; 2001WO-EP006713.  
 PF  
 XX 16-JUN-2000; 2000US-0211914P.  
 PR 23-JUN-2000; 2000EP-00113049.  
 PR 28-JUN-2000; 2000US-0214518P.  
 PR 17-APR-2001; 2001EP-00109537.  
 XX  
 XX (DEVE-) DEVELOGEN AG.  
 PA  
 XX Broenner G, Ciossek T, Dohrmann C, Haeder T, Rothe M;  
 XX WPI; 2002-106464/14.  
 DR  
 XX Novel nucleic acid encoding adipose polypeptide which regulates, causes  
 FT or contributes to obesity, useful for treating obesity, heart disease,  
 PT hypertension, infertility, and controlling weight loss in cancer  
 PT patients.

XX Claim 1; Page 171; 189pp; English.  
 PS The invention relates to a nucleic acid encoding a adipose (ADP)  
 CC polypeptide which regulates, causes or contributes to obesity in an  
 CC animal or a human. The polynucleotides, proteins, ant-adv antibodies,  
 CC modulators of adp activity; adp antisense nucleic acids, expression  
 CC vectors, adp transgenic animals are useful in the diagnosis and treatment  
 CC of obesity, adipositas, bulimia, wasting (cachexia), eating disorders  
 CC and/or disorders of body weight/body mass, weight loss due to cancer or  
 CC infectious diseases, genetic disorders associated with hypogonadism e.g.  
 CC Prader-Willi syndrome, Laurence-Moon-Biedl syndrome, hypothyroidism,  
 CC diabetes, Cushing's syndrome, endocrine disorders, gastrointestinal  
 CC diseases, inflammatory bowel disease, ulcerative colitis, and anorexia  
 CC nervosa. They are also useful for treating disorders of body weight/mass  
 CC e.g. glycogen storage diseases, and lipid storage diseases and for  
 CC treating lipomas, and/or liposarcomas. The compositions are also useful  
 CC for treating heart disease, hypertension, and infertility and for  
 CC treating conditions associated with under weight e.g. enhancing or  
 CC controlling fertility, controlling weight loss in acquired  
 CC immunodeficiency syndrome (AIDS) or cancer patients. The present sequence  
 CC is a PCR primer used to amplify an adp nucleic acid  
 XX Sequence 21 BP; 4 A; 8 C; 5 G; 4 T; 0 U; 0 Other;  
 SQ

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1029 GCGTGACTTGGCCTGGCC 1047  
 DB 3 GGCACACTTTCGCTGGCC 21

RESULT 856  
 ABK16377/C  
 ID ABK16377 standard; DNA; 21 BP.  
 AC ABK16377;  
 XX  
 DT 14-MAR-2002 (first entry)  
 XX Human adipose protein, adp, PCR primer #7.  
 DE Adipose protein; ss; adp; obesity; transgenic animal; obesity;  
 KW adipositas; bulimia; wasting; cachexia; eating disorder;  
 KW body weight disorder; weight loss; cancer; infectious disease;  
 KW hypogonadism; Prader-Willi syndrome; Laurence-Moon-Biedl syndrome;  
 KW hypothyroidism; diabetes; Cushing's syndrome; endocrine disorder;  
 KW gastrointestinal diseases; inflammatory bowel disease; PCR primer;  
 KW ulcerative colitis; anorexia nervosa; glycogen storage disease;  
 KW lipid storage disease; lipoma; liposarcoma; heart disease; hypertension;  
 KW infertility; acquired immunodeficiency syndrome; AIDS.  
 XX Homo sapiens.  
 OS  
 XX WO200196371-A2.  
 PN  
 XX 20-DEC-2001.  
 PD  
 XX 13-JUN-2001; 2001WO-EP006713.  
 PF  
 XX 16-JUN-2000; 2000US-0211914P.  
 PR 23-JUN-2000; 2000EP-00113049.  
 PR 28-JUN-2000; 2000US-0214518P.  
 PR 17-APR-2001; 2001EP-00109537.  
 XX  
 XX (DEVE-) DEVELOGEN AG.  
 PA  
 XX Broenner G, Ciossek T, Dohrmann C, Haeder T, Rothe M;  
 XX WPI; 2002-106464/14.



PT Novel nucleic acid encoding adipose polypeptide which regulates, causes  
PT or contributes to obesity, useful for treating obesity, heart disease,  
PT hypertension, infertility, and controlling weight loss in cancer  
PT patients.

PS Claim 1; Page 171; 189pp; English.  
XX  
CC The invention relates to a nucleic acid encoding a adipose (ADP)  
CC polypeptide which regulates, causes or contributes to obesity in an  
CC animal or a human. The polynucleotides, proteins, ant-adp antibodies,  
CC modulators of adp activity, adp antisense nucleic acids, expression  
CC vectors, adp transgenic animals are useful in the diagnosis and treatment  
CC of obesity, adipositas, bulimia, wasting (cachexia), eating disorders  
CC and/or disorders of body weight/body mass, weight loss due to cancer or  
CC infectious diseases, genetic disorders associated with hypogonadism e.g.  
CC Prader-Willi syndrome, Laurence-Moon-Biedl syndrome, hypothyroidism,  
CC diabetes, Cushing's syndrome, endocrine disorders, gastrointestinal  
CC diseases, inflammatory bowel disease, ulcerative colitis, and anorexia  
CC nervosa. They are also useful for treating disorders of body weight/mass  
CC e.g. glycogen storage diseases, and lipid storage diseases and for  
CC treating lipomas, and/or liposarcomas. The compositions are also useful  
CC for treating heart disease, hypertension, and infertility and for  
CC treating conditions associated with under weight e.g. enhancing or  
CC controlling fertility, controlling weight loss in acquired  
CC immunodeficiency syndrome (AIDS) or cancer patients. The present sequence  
CC is a PCR primer used to amplify an adp nucleic acid  
XX  
SQ Sequence 21 BP; 4 A; 5 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1029 GGCTGACTTTGGCTGGCC 1047  
DB 19 GGCACACTTTCGCTGGCC 1

RESULT 857  
ABL61474  
ID ABL61474 standard; DNA; 21 BP.  
AC ABL61474;  
XX  
DT 17-SEP-2002 (first entry)  
XX  
DE Human UGT1A7 codon 11 polymorphism associated primer A.  
XX  
KW UGT1A7; uridine diphosphate-5'-glucuronosyl transferase; UGP; primer;  
KW carcinoma; inflammatory bowel disease; genetic predisposition; colon;  
KW polymorphism; UGT1A7\*2; UGT1A7\*3; UGT1A7\*4; antitumour; cytostatic;  
KW antinflammatory; gene therapy; diagnosis; pancreas; liver; stomach;  
KW oesophagus; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200253770-A2.  
XX  
PD 11-JUL-2002.  
XX  
PP 03-JAN-2002; 2002WO-DE0000003.  
XX  
PR 05-JAN-2001; 2001DE-01000238.  
XX  
XX (MEDI-) MEDIZINISCHE HOCHSCHULE HANNOVER.  
PA  
PA Manns M, Strassburg C;  
PI  
XX WPI; 2002-509023/54.  
DR  
XX Diagnosing, and predicting risk, of carcinoma and inflammatory bowel  
PT disease, comprises detecting polymorphisms in the gene for uridine  
PT diphosphate-5'-glucuronosyl transferase.

XX  
PS Example 1; Page 12; 26pp; German.  
XX  
CC This invention describes a novel method of predicting the risk, and/or  
CC for diagnosis of carcinoma and inflammatory bowel disease (IBD)  
CC associated with a genetic predisposition. The method comprises testing a  
CC subject's DNA for the presence of a polymorphic UGT1A7 allele (UGT =  
CC uridine diphosphate-5'-glucuronosyl transferase) that contains mutations  
CC in codons 11, 129, 131 and/or 208. Polymorphic UGT1A7\*2, UGT1A7\*3 or  
CC UGT1A7\*4 genes are used for preparing the corresponding UGT isoforms for  
CC metabolic characterization of antitumour therapeutics and for examining  
CC toxicity/carcinogenicity of potential UGT1A7 substrates. The products of  
CC the invention have cytostatic and antiinflammatory activity and are  
CC appropriate for gene therapy. The method of the invention is used for  
CC diagnosis, or assessing risk, of carcinoma, especially of the colon, early  
CC pancreas, liver, stomach or oesophagus, and IBD. The method allows a primer  
CC identification of subjects at risk. This sequence represents a primer  
CC used in the identification of the UGT1A7 polymorphism at codon 11 of the  
CC wild-type UGT1A7 gene  
XX  
SQ Sequence 21 BP; 2 A; 7 C; 7 G; 5 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 938 GTGGCTGGCTACTGCCA 956  
DB 3 GTGGACTGGCTCCTTCCA 21

RESULT 858  
ABX99015/c  
ID ABX99015 standard; DNA; 21 BP.  
XX  
AC ABX99015;  
XX  
DT 20-MAY-2003 (first entry)  
XX  
DE Human AAGA SNP analysis PCR primer, #42.  
XX  
KW Human; PCR; primer; ss; asthma; bronchial hyperresponsiveness;  
KW airway obstruction; chronic bronchial inflammation;  
KW multifactorial disease; asthma-associated gene; AAGA; allele-specific;  
KW single nucleotide polymorphism; SNP; genetic profile; gene therapy;  
KW antisense gene therapy; adult distress respiratory syndrome;  
KW chronic obstructive pulmonary; chronic bronchitis; dyspnea.  
XX  
OS Homo sapiens.  
XX  
PN WO2003008640-A2.  
XX  
PD 30-JAN-2003.  
XX  
PF 15-JUL-2002; 2002WO-EP007847.  
XX  
PR 16-JUL-2001; 2001US-0305649P.  
XX  
PA (NOVS ) NOVARTIS AG.  
PA (NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.  
PA (UYWA-) UNIV WAKE FOREST HEALTH SCI.  
PA (UYGR-) RIJKSUNIV GRONINGEN.  
XX  
PI Whittaker PA, Meyers DA, Postma DS, Bleecker ER;  
XX  
XX WPI; 2003-239359/23.  
XX  
XX Determining whether a subject has or is at risk of developing a disease  
PT characterized by bronchial hyperresponsiveness, comprises determining the  
PT expression or bioactivity level of an asthma-associated gene.  
XX  
XX Example 3; Page 27; 70pp; English.  
PS  
XX



CC The invention discloses a method for determining a disease (e.g. asthma)  
 CC characterised by bronchial hyperresponsiveness, or the risk of developing  
 CC it and airway obstruction or chronic bronchial inflammation. Asthma is a  
 CC multifactorial disease, so discovery of the asthma susceptibility genes  
 CC can identify the fundamental mechanisms behind asthma. One such gene is  
 CC the asthma-associated gene, AAGA. Also disclosed is an allele-specific  
 CC primer or oligonucleotide probe capable of detecting a polymorphism, an  
 CC isolated polynucleotide, and encoded polypeptide, which is a variant of  
 CC AAGA associated with bronchial hyperresponsiveness and methods for  
 CC pharmacogenomically selecting a therapy to be administered to an  
 CC individual having asthma, comprising determining an AAGA genetic profile  
 CC and comparing the individual's genetic profile to an AAGA genetic  
 CC population profile, monitoring the effectiveness of treatment (e.g. gene  
 CC therapy or antisense gene therapy) of a subject and identifying a  
 CC substance which binds to or modulates the activity of AAGA. The  
 CC polynucleotide, polypeptide encoded by it, antibody to the polypeptide,  
 CC or an oligonucleotide, is useful for preparing a medicament for treating  
 CC a disease characterised by bronchial hyperresponsiveness, or inflammatory  
 CC or obstructive airways diseases, e.g. adult distress respiratory  
 CC syndrome, chronic obstructive pulmonary, chronic bronchitis or dyspnea.  
 CC The method is useful for prognosing, diagnosing or confirming that a  
 CC symptomatic subject has a genetic defect which causes or contributes to  
 CC the particular disease or disorder, for ascertaining an individual's  
 CC predilection to develop bronchial responsiveness and for customising a  
 CC therapy for the individual according to the individual's genetic profile.  
 CC The sequences presented in ABX98968-ABX99053 and ABX99084-ABX99066 are  
 CC PCR primers which were used to amplify sequences used in human AAGA  
 CC vector construction and primers used to analyse AAGA single nucleotide  
 CC polymorphisms (SNPs)  
 CC  
 CC Sequence 21 BP; 3 A; 5 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1380 GGCGGACCTCTCCACCAAG 1398

DB 21 GGCTGACCTCTCACCAAG 3

RESULT 859

ACD02587/C

ID ACD02587 standard; DNA; 21 BP.

AC ACD02587;

XX 31-JUL-2003 (first entry)

DE Mouse zsig37 orthologue sequencing primer ZC18687.

XX Blood flow; vasodilation; wound repair; platelet inhibition; tumour;

KW vascular occlusion; ischaemic reperfusion injury; microvascular repair;

KW adipocyte complement related protein; intestinal stranguation; trauma;

KW angioplasty; coronary artery bypass graft; endarterectomy; aneurysm;

KW anastomosis; stroke; cardiopulmonary bypass ischaemia; inflammation;

KW myocardial infarction; percutaneous transluminal angioplasty; infection;

KW post-trauma vasospasm; prostatic biomaterial; fibroblast recruitment;

XX wound retraction; mouse; zsig37; primer; ss; sequencing; PCR.

OS Mus musculus.

FN US2003022838-A1.

XX 30-JAN-2003.

XX 25-JUN-2002; 2002US-00180762.

XX 19-FEB-1999; 99US-00253604.

XX 22-NOV-1999; 99US-0044794.

XX 17-FEB-2000; 2000US-00506855.

XX 19-JUL-2000; 2000US-00619740.

PA

PA (SHEP/) SHEPPARD P O.

PA (LASS/) LASSER G W.

PA (BISH/) BISHOP P D.

XX

PI Sheppard PO, Laaser GW, Bishop PD;

XX WPI; 2003-456304/43.

XX Promoting blood flow or inducing vasodilation within vasculature of

PT mammal, or pacifying damaged collagenous tissues or pacifying surface of

PT prostatic biomaterial, by administering adipocyte complement related

PT protein.

XX Example 9; Page 29; 46pp; English.

XX The invention relates to a method of promoting blood flow or inducing

CC vasodilation within the vasculature of a mammal, pacifying damaged

CC collagenous tissues or surface of prostatic biomaterial, mediating wound

CC repair, inhibiting platelet adhesion, activation or accretion, minimising

CC vascular occlusion, protecting ischaemic myocardium from reperfusion

CC injury or mediating tumour metastasis, comprising administering adipocyte

CC complement related protein. The method is useful for promoting blood flow

CC within the vasculature of a mammal, where the mammal suffers from acute

CC vascular injury, where the injury is due to vascular reconstruction which

CC comprises angioplasty, coronary artery bypass graft, endarterectomy,

CC microvascular repair or anastomosis of a vascular graft, or the injury is

CC due to trauma, stroke or aneurysm. The method is useful for pacifying

CC damaged collagenous tissues within a mammal, where the damaged

CC collagenous tissues are due to injury associated with ischaemia and

CC reperfusion. The injury comprises trauma injury, ischaemia, intestinal

CC strangulation, or injury associated with pre- and post-establishment of

CC blood flow. The mammal suffers from cardiopulmonary bypass ischaemia and

CC resection, myocardial infarction, or post-trauma vasospasm. The post-

CC trauma vasospasm comprises stroke, percutaneous transluminal angioplasty,

CC endarterectomy, accidental vascular trauma or surgical-induced vascular

CC trauma. The method is useful for pacifying the surface of a prostatic

CC biomaterial for use in association with a mammal, where the surface of

CC the prostatic biomaterial is coated with collagen or collagen fragments,

CC gelatin, fibrin or fibronectin. The method is useful for mediating wound

CC repair within a mammal, where the method enhances progression in wound

CC healing and progression in wound healing comprises reduction in

CC inflammation, reduction in fibroblast recruitment, wound retraction, or

CC reduction in infection. The method is useful for inhibiting platelet

CC adhesion, activation or accretion. The method is useful for minimising

CC vascular occlusion by increasing patency time in a patient in need of the

CC treatment. The method is useful for inducing vasodilation within the

CC vasculature of a mammal. The method is useful for protecting ischaemic

CC myocardium from reperfusion injury. The method is useful for mediating

CC tumour metastasis. The present sequence represents the mouse adipocyte

CC complement related protein zsig27 DNA orthologue sequencing primer

XX

SQ Sequence 21 BP; 5 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 7.6e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 822 GAAGTCCTCTCACCTGTC 840

DB 21 GAAGTCCTCTCACCTGTC 3

RESULT 860

ABX04548/C

ID ABX04548 standard; DNA; 21 BP.

XX

AC ABX04548;

XX

DT 13-JAN-2003 (first entry)

XX Mouse adipose complement related protein zsig37 primer ZC18687.

DE Mouse; ss; primer; adipocyte complement related protein; zsig37;

XX

chromosome 17q25.2; blood flow; vulnery; antibacterial; vasotropic;  
 KW anticoagulant; immunosuppressive; damaged collagenous tissue;  
 KW complement activation; thrombosis; trauma; ischaemia; reperfusion;  
 KW intestinal strangulation; cardiopulmonary bypass ischaemia;  
 KW myocardial infarction; post-trauma vasospasm; stroke;  
 KW percutaneous transluminal angioplasty; endarterectomy;  
 KW accidental vascular trauma; surgical-induced vascular trauma;  
 KW haemostasis; wound healing; antimicrobial.  
 XX Mus musculus.  
 XX US6448221-B1.  
 XX 10-SEP-2002.  
 XX 17-FEB-2000; 2000US-00506855.  
 XX 19-FEB-1999; 99US-00253604.  
 XX 22-NOV-1999; 99US-00444794.  
 XX (ZYMO) ZYMOGENETICS INC.  
 XX Sheppard PO, Lasser GW, Bishop PD;  
 XX WPI; 2003-038245/03.  
 XX Promoting blood flow within the vasculature of a mammal, comprises  
 PT administering a pharmaceutical formulation comprising zsig37 proteins.  
 XX Example 9; Col 53; 39pp; English.  
 XX The invention relates to promoting blood flow within the vasculature of a  
 CC mammal, comprises administering to the mammal an amount of a  
 CC pharmaceutical formulation that comprises an adipocyte complement related  
 CC protein, zsig37, having residues 28-281 of a sequence appearing as  
 CC ABG9070. Also included is a method of pacifying damaged collagenous  
 CC tissues within a mammal, comprising administering to the mammal an amount  
 CC of the pharmaceutical formulation cited above, which achieves  
 CC pacification of the damaged collagenous tissues by inhibiting complement  
 CC activation or by reducing thrombosis formation. The method is useful in  
 CC promoting blood flow within the vasculature of a mammal by reducing  
 CC thrombogenic and complement activity, and in pacifying damaged  
 CC collagenous surfaces (e.g. in trauma, ischaemia, reperfusion, intestinal  
 CC strangulation, cardiopulmonary bypass ischaemia, myocardial infarction,  
 CC post-trauma vasospasm, stroke, percutaneous transluminal angioplasty,  
 CC endarterectomy, accidental vascular trauma or surgical-induced vascular  
 CC trauma). The zsig37 polypeptide, polynucleotide, and an anti-zsig37  
 CC antibody are useful as inhibitors of haemostasis and immune function, in  
 CC modulating wound healing, and for antimicrobial applications. The human  
 CC gene for zsig37 is located on chromosome 17q25.2. The present sequence is  
 CC a primer used to sequence cDNA encoding mouse zsig37  
 XX  
 SQ Sequence 21 BP; 5 A; 4 C; 8 G; 4 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 822 GAAGTCCCTCACCCCTGTC 840  
 DB 21 GAAGTCCCTCTCACGTGTC 3  
 RESULT 861  
 ACD26013/C  
 ID ACD26013 standard; DNA; 21 BP.  
 XX  
 AC ACD26013;  
 XX  
 DT 01-SEP-2003 (first entry)  
 XX  
 DE Human Folate receptor alpha antisense oligonucleotide #8.

Human; ss; antisense; folate receptor alpha; cytostatic; gene therapy;  
 KW ribozyme; ovarian cancer; cervical cancer; uterine cancer; brain cancer.  
 XX Homo sapiens.  
 XX US2003050267-A1.  
 XX 13-MAR-2003.  
 XX 11-MAR-2002; 2002US-00093523.  
 XX 09-MAR-2001; 2001US-0274249P.  
 XX (JHAV/) JHAVERI M S.  
 XX (ELWO/) ELWOOD P C.  
 XX (CHUN/) CHUNG K.  
 XX Jhaveri MS, Elwood PC, Chung K;  
 XX WPI; 2003-503577/47.  
 XX New antisense oligonucleotide, useful for preparing a composition for  
 PT treating cancer.  
 XX Example 10; Page 10; 23pp; English.  
 XX The invention relates to an antisense oligonucleotide complementary to a  
 CC region of the open reading frame of human folate receptor alpha  
 CC comprising a 774-bp sequence. Also included are inhibiting growth of  
 CC cancer cells susceptible to growth inhibition, a ribozyme containing the  
 CC antisense oligonucleotide and a vector comprising the antisense  
 CC oligonucleotide. The antisense oligonucleotide is useful for preparing a  
 CC composition for treating cancer of the ovary, cervix, uterus and brain.  
 CC The present sequence is an antisense oligonucleotide targeting the human  
 CC folate receptor alpha cDNA  
 XX  
 SQ Sequence 21 BP; 2 A; 8 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1076 ACTCCCAATGAGGTGGTGC 1094  
 DB 20 ACCCCAATGAGGTGGTGC 2  
 RESULT 862  
 ACD25911  
 ID ACD25911 standard; DNA; 21 BP.  
 XX  
 AC ACD25911;  
 XX  
 DT 29-AUG-2003 (first entry)  
 XX  
 DE Mouse tryptase-like polypeptide Ztryp-1 related PCR primer #2.  
 XX  
 KW Mouse; tryptase-like protein; atryp-1; cardiovascular; cardiac;  
 KW antiinflammatory; antiarthritic; antiinfertility; contraceptive;  
 KW protein therapy; contractile tissue dysfunction; cardiovascular disease;  
 KW inflammatory actions in heart; inflammatory bowel disease; arthritis;  
 KW infertility; impotence; male reproductive dysfunction; birth control;  
 KW in vitro fertilisation; birth; PCR; primer; ss.  
 XX  
 XX Mus musculus.  
 OS  
 XX US6514741-B1.  
 XX  
 XX 04-FEB-2003.  
 XX  
 XX 09-AUG-2000; 2000US-00636382.  
 XX  
 XX 18-AUG-1999; 99US-0149563P.  
 XX

XX PA (ZYMO ) ZYMOGENETICS INC.  
XX PI Presnell SR, Taft DW;  
XX DR WPI; 2003-491701/46.  
XX PT New tryptase-like polypeptides (ZTRYP1), useful for treating a  
PT dysfunction associated with contractile tissues (e.g. heart), for  
PT arthritis or infertility.  
XX PS Example 1; Col 63-64; 40pp; English.  
XX CC The invention describes a new polypeptide (ZTRYP1) having a sequence  
CC comprising amino acid residues 44 (Val) - 276 (Ile), 24 (Leu) - 276  
CC (Ile), 44 (Val) - 314 (Leu), 24 (Leu) - 314 (Leu), or 1 (Met) - 314  
CC (Leu), of a 314-amino acid Mus musculus sequence (mmp); 43 (Val) - 275  
CC (Arg), 19 (Arg) - 275 (Arg), 43 (Val) - 312 (Leu), 19 (Arg) - 312 (Leu),  
CC or 1 (Met) - 312 (Leu) of a 312-amino acid Homo sapiens sequence (hsp) or  
CC of a 233 fusion polypeptide sequence. The ZTRYP1 polypeptide is useful  
CC for treating a dysfunction associated with contractile tissues (e.g.  
CC lung, gastrointestinal, heart, vas deferens or prostate tissues), and may  
CC be used for suppressing or enhancing contractility in vivo. In  
CC particular, the ZTRYP1 polypeptide is useful for treating or diagnosing  
CC cardiovascular disease (e.g. inflammatory actions in heart), inflammatory  
CC bowel disease, arthritis, infertility, impotence or other male  
CC reproductive dysfunction. The polypeptide is also useful in birth  
CC control, in vitro fertilisation, or inducing birth. This sequence  
CC represents a primer used to identify mouse tryptase-like protein Ztryp-1  
XX SQ Sequence 21 BP; 1 A; 9 C; 4 G; 7 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 1195 GCGCTGCTCCCTCTTCGG 1213  
DB 2 GCGCTGCTCCCTCTTCGG 20  
  
RESULT 863  
ADC01969/c  
ID ADC01969 standard; DNA; 21 BP.  
XX AC ADC01969;  
XX DT 18-DEC-2003 (first entry)  
XX DE Human zsig37 cDNA sequencing primer #26.  
XX KW Human; zsig37; ss; chromosome 17q25.2; vascular occlusion; vasodilation;  
KW adipocyte complement related protein; vascular injury;  
KW vascular reconstruction; trauma; stroke; aneurysm; plaque rupture;  
KW vasculature; diabetes; atherosclerosis; blood flow; vasorelaxant;  
KW tranquiliser; vulnery; cerebroprotective; antiatherosclerotic;  
KW sequencing; primer.  
XX OS Homo sapiens.  
XX XX US6544946-B1.  
XX PI Presnell SR, Taft DW;  
XX DR 08-APR-2003.  
XX XX 19-JUL-2000; 2000US-00619740.  
XX PF 19-FEB-1999; 99US-00253604.  
XX PR 22-NOV-1999; 99US-00444794.  
XX PR 17-FEB-2000; 2000US-00506855.  
XX XX (ZYMO ) ZYMOGENETICS INC.  
XX PA

PI Sheppard PO, Lasser GW, Bishop PD;  
XX WPI; 2003-707011/67.  
XX PT Minimizing vascular occlusion or inducing vasodilation within the  
PT vasculature of a mammal, by administering an adipocyte complement related  
PT protein, zsig37 that promotes blood flow.  
XX PS Example 9; SEQ ID NO 41; 44pp; English.  
XX CC The invention relates to a method for minimising vascular occlusion or  
CC inducing vasodilation within a mammal, involving administering a  
CC formulation comprising an adipocyte complement related protein, zsig37.  
CC The method is useful for minimising vascular occlusion and inducing  
CC vasodilation in a mammal suffering from acute vascular injury which may  
CC be due to vascular reconstruction, trauma, stroke or aneurysm. The  
CC vascular injury is due to plaque rupture, degradation of the vasculature,  
CC complications associated with diabetes and atherosclerosis.  
CC Administration of the formulation promotes blood flow or elicits a  
CC vasorelaxant response. This sequence represents a primer used to sequence  
CC cDNA encoding the human zsig37 polypeptide of the invention.  
XX SQ Sequence 21 BP; 5 A; 4 C; 8 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 822 GAAGTCCTCTCACCTTCGTC 840  
DB 21 GAAGTCCTCTCACCTTCGTC 3  
  
RESULT 864  
ADC17380  
ID ADC17380 standard; DNA; 21 BP.  
XX AC ADC17380;  
XX DT 18-DEC-2003 (first entry)  
XX DE Mouse serine protease ztryp1 primer seq id 5.  
XX KW cardiant; antiinflammatory; antiasthmatic; antiarthritic;  
KW antiinfectivity; contraceptive; serine protease; cancer; immune disorder;  
KW Ztryp1; inflammatory disorder; reproductive disorder; infertility;  
KW contraceptive; testicular disorder; heart disorder; asthma; arthritis;  
KW mouse; PCR; primer; ss.  
XX OS Mus sp.  
XX XX US2003119035-A1.  
XX PN 26-JUN-2003.  
XX PD 01-OCT-2002; 2002US-00261845.  
XX PF 09-AUG-2000; 2000US-00636382.  
XX PR (ZYMO ) ZYMOGENETICS INC.  
XX PA Presnell SR, Taft DW;  
XX PI WPI; 2003-645495/61.  
XX DR New Ztryp1 gene, useful in diagnosing diseases associated with the ztryp1  
PT gene, e.g., cancer or immune disorders.  
XX XX Example 1; SEQ ID NO 5; 44pp; English.  
XX CC The invention describes a new isolated polynucleotide encoding a serine  
CC protease polypeptide comprising a sequence of amino acid residues that is  
CC 90% identical to a sequence comprising: amino acid residues 44-276, 24-

CC 276, 44-314, 24-314 or 1-314 of the 314-amino acid sequence or amino acid  
 CC residues 43-275, 19-275, 43-312, 19-312 of the 312-amino acid  
 CC sequence; or 233 amino acids. The polynucleotide is useful in diagnosing  
 CC diseases associated with the ztryl gene, e.g., cancer or immune  
 CC disorders. Ztryl proteins are useful for treating inflammatory,  
 CC reproductive (e.g., infertility and contraceptive), testicular and heart  
 CC disorders. They are also useful for treating asthma and arthritis. This  
 CC sequence represents a primer used in the isolation and analysis of mouse  
 CC serine protease ztryl.

XX SQ Sequence 21 BP; 1 A; 9 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1195 GGCGTCCCTCTTCCGG 1213  
 ||| ||||| |||||  
 DB 2 GGTGTCCCTCTTCTG 20

RESULT 865  
 AAD5914/C  
 ID AAD5914 standard; DNA; 21 BP.  
 XX AAD5914;  
 AC AAD5914;  
 AT 18-DEC-2003 (first entry)  
 DE ZC18697 oligo used to identify mouse zisg37 DNA.  
 XX KW Adipocyte complement related protein; collagenous surface pacification;  
 KW wound healing; tumour metastasis; gene therapy; thrombogenic; mouse;  
 KW Acrp; zisg37; ss.  
 XX OS Mus musculus.  
 XX US2003144208-A1.  
 XX 31-JUL-2003.  
 XX 07-FEB-2003; 2003US-00360186.  
 XX 19-FEB-1999; 99US-00253604.  
 XX 22-NOV-1999; 99US-00444794.  
 XX 17-FEB-2000; 2000US-00506855.  
 XX 19-JUL-2000; 2000US-00619740.  
 XX (SHEP/) SHEPPARD P O.  
 XX (LASS/) LASSER G W.  
 XX (BISH/) BISHOP P D.  
 XX Sheppard PO, Lasser GW, Bishop PD;  
 XX WPI; 2003-755532/71.  
 XX Promoting blood flow within the vasculature of a mammal, comprising  
 XX administering an adipocyte complement related protein to reduce  
 XX thrombogenic and complement activity within the vasculature.  
 XX Example 9; Page 29; 48pp; English.  
 XX The invention relates to a method of promoting blood flow within the  
 XX vasculature of a mammal. The method involves administering an adipocyte  
 XX complement related protein (Acrp) to the mammal to reduce and complement  
 XX activity within the vasculature. Methods and compositions of the  
 XX invention are useful in promoting blood flow within the vasculature of a  
 XX mammal, in pacifying collagenous surfaces, in modulating wound healing or  
 XX mediating tumour metastasis. The invention is also useful in gene  
 XX therapy. The present sequence is an oligo used to identify mouse  
 XX adipocyte complement related protein homologue (zisg37) DNA  
 XX Sequence 21 BP; 5 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;  
 Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 822 GAAGTCCTCCACCTGTGC 840  
 ||| ||||| |||||  
 DB 21 GAAGTCCTCCACCTGTGC 3

RESULT 866  
 ADD14411/C  
 ID ADD14411 standard; DNA; 21 BP.  
 XX ADD14411;  
 AC ADD14411;  
 AT 01-JAN-2004 (first entry)  
 DE Human src biomarker reverse PCR primer SEQ ID NO:600.  
 XX KW predictor set; protein tyrosine kinase activity modulator;  
 KW protein tyrosine kinase pathway; protein tyrosine kinase; cytostatic;  
 KW gene therapy; drug sensitivity; genetic profile; cancer; human;  
 KW PCR primer; ss.  
 XX OS Synthetic.  
 XX Homo sapiens.  
 XX WO2003062395-A2.  
 XX 31-JUL-2003.  
 XX 17-JAN-2003; 2003WO-US001981.  
 XX 18-JAN-2002; 2002US-0350061P.  
 XX (BRIM ) BRISTOL-MYERS SQUIBB CO.  
 XX Huang F, Fairchild CR, Lee FY, Shaw P;  
 XX WPI; 2003-636735/60.  
 XX New polynucleotides and polypeptides for predicting the activity of  
 XX compounds that interact with protein tyrosine kinases and/or protein  
 XX tyrosine kinase pathways.  
 XX Example 2; SEQ ID NO 600; 139pp; English.  
 XX The present invention describes a predictor set comprising a plurality of  
 XX polynucleotides or polypeptides whose expression pattern is predictive of  
 XX the response of cells to treatment with a compound that modulates protein  
 XX tyrosine kinase activity or members of the protein tyrosine kinase  
 XX pathway. Also described: (1) predicting whether a compound is capable of  
 XX modulating the activity of cells, comprising obtaining a sample of cells,  
 XX determining whether the cells express a plurality of markers, and  
 XX correlating the expression of the markers to the compound's ability to  
 XX modulate the activity of the cells; (2) a plurality of cell lines for  
 XX identifying polynucleotides and polypeptides whose expression levels  
 XX correlate with compound sensitivity or resistance of cells associated  
 XX with a disease state; and (3) identifying polynucleotides and  
 XX polypeptides that predict compound sensitivity or resistance of cells  
 XX associated with a disease state, comprising subjecting the plurality of  
 XX cell lines to one or more compounds, analysing the expression pattern of  
 XX a microarray of polynucleotides or polypeptides, and selecting  
 XX polynucleotides or polypeptides that predict the sensitivity or  
 XX resistance of cells associated with a disease state by using the  
 XX expression pattern of the microarray. The polynucleotides and  
 XX polypeptides have cytostatic activities, and can be used in gene therapy.  
 XX The polynucleotides and polypeptides are useful in predicting the  
 XX activity of compounds that interact with protein tyrosine kinases and/or  
 XX protein tyrosine kinase pathways. These may be used in determining drug  
 XX sensitivity in patients to allow the development of individualized  
 XX genetic profiles which aid in treating diseases and disorders (e.g.

CC cancer) based on patient response at a molecular level. The present  
CC sequence is used in the exemplification of the present invention.  
XX  
SQ Sequence 21 BP; 2 A; 8 C; 3 G; 8 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 18 ATGCAGAGGATTCACAGG 36  
Db 19 ATGCAGAGGAACTCAGAGG 1  
  
RESULT 867  
ADC84418/c  
ID ADC84418 standard; DNA; 21 BP.  
XX  
AC ADC84418;  
XX  
XX 01-JAN-2004 (first entry)  
XX HPV detection method-related oligonucleotide Gap21-3.  
DE  
XX probe; human papilloma virus; HPV; detection; identification; SS;  
XX Gap21-3.  
XX Unidentified.  
XX  
XX EPI302550-A1.  
XX  
XX 16-APR-2003.  
XX  
XX 10-OCT-2001; 2001EP-00123379.  
XX  
XX 10-OCT-2001; 2001EP-00123379.  
XX  
XX (KING-) KING CAR FOOD IND CO LTD.  
XX  
XX Lin C, Lin R, You C, Huang H, Lee B, Lee H, Lin Y, Fan C;  
XX Hsu H, Shih C, Yeh C, Kao Y, Pan C, Chan P;  
XX WPI; 2003-432398/41.  
XX  
XX Detector for identifying human papilloma virus subtypes, comprises  
XX carrier having two parts carrying first and second oligonucleotides that  
XX respectively hybridize with DNA contained in first and second subtypes of  
XX the virus.  
XX  
XX Disclosure; SEQ ID NO 648; 221pp; English.  
XX  
XX The invention comprises oligonucleotides for detecting and identifying  
XX subtypes of human papilloma virus (HPV) contained in a sample. The  
XX oligonucleotides of the invention are useful for simultaneously detecting  
XX and identifying subtypes of HPVs. The present DNA sequence represents an  
XX oligonucleotide that was used in the exemplification of the invention.  
XX  
SQ Sequence 21 BP; 5 A; 9 C; 3 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 14.2; DB 1; Length 21;  
Best Local Similarity 84.2%; Pred. No. 7.6e+02;  
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 1156 ATGTGGGGTGTGGGTGCA 1174  
Db 19 ATGTGGGGAGTACGTGCA 1  
  
RESULT 868  
AAT55032  
ID AAT55032 standard; RNA; 15 BP.  
XX  
XX AAT55032;  
AC

XX 25-MAR-2003 (revised)  
DT 18-APR-1997 (first entry)  
XX Human rrlA hammerhead ribozyme target sequence (nt. position 630).  
DE  
XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;  
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;  
KW intercellular adhesion molecule; rel A; tumour necrosis factor;  
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;  
KW translocation; chronic myelogenous leukaemia; CML; cancer;  
KW Philadelphia chromosome; inflammation; autoimmune disease;  
KW atherosclerosis; myocardial infarction; stroke; restenosis;  
KW transplant rejection; rheumatoid arthritis; psoriasis;  
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;  
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;  
KW ss.  
XX  
XX Homo sapiens.  
OS  
XX WO9523225-A2.  
PN  
XX 31-AUG-1995.  
PD  
XX 23-FEB-1995; 95WO-IB000156.  
PP  
XX 23-FEB-1994; 94US-00201109.  
PR 29-MAR-1994; 94US-00218934.  
PR 04-APR-1994; 94US-00222795.  
PR 07-APR-1994; 94US-00224483.  
PR 15-APR-1994; 94US-00227958.  
PR 15-APR-1994; 94US-00228041.  
PR 18-MAY-1994; 94US-00245736.  
PR 06-JUL-1994; 94US-00271280.  
PR 15-AUG-1994; 94US-00291932.  
PR 16-AUG-1994; 94US-00291433.  
PR 17-AUG-1994; 94US-00292620.  
PR 19-AUG-1994; 94US-00293520.  
PR 02-SEP-1994; 94US-00300000.  
PR 08-SEP-1994; 94US-00303039.  
PR 23-SEP-1994; 94US-00311486.  
PR 23-SEP-1994; 94US-00311749.  
PR 28-SEP-1994; 94US-00314397.  
PR 03-OCT-1994; 94US-00316771.  
PR 07-OCT-1994; 94US-00319492.  
PR 11-OCT-1994; 94US-00321993.  
PR 04-NOV-1994; 94US-00334847.  
PR 10-NOV-1994; 94US-00337608.  
PR 28-NOV-1994; 94US-00345516.  
PR 16-DEC-1994; 94US-00357577.  
PR 23-DEC-1994; 94US-00363233.  
PR 30-JAN-1995; 95US-00380734.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;  
PI Grimm S, Karpelsky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;  
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;  
PI Tracz D, Usman N, Wincott FE, Woolf T;  
XX WPI; 1995-351090/45.  
XX  
XX Ribozymes having modified bases and methods for producing them - for use  
XX in inhibiting disease related genes.  
XX  
XX Claim 2; Page 228; 407pp; English.  
XX  
XX The present sequence represents a preferred target sequence for an  
XX enzymatic nucleic acid (i.e. a ribozyme) which cleaves rrlA mRNA at the  
XX nucleotide base position indicated in the DE line. The rrlA gene product  
XX is a subunit of the transcriptional regulator NF-kappaB and is implicated  
XX specifically in the induction of inflammatory responses. Regions of the  
XX mRNA that do not form secondary folding structures and that contain

CC potential hammerhead and hairpin ribozyme cleavage sites were identified  
 CC by computer analysis. Ribozymes directed against these mRNA sequences  
 CC were designed and synthesised with modifications that improve their  
 CC nuclease resistance. The ribozymes are designed to cleave the target  
 CC sequences and thereby inhibit relA expression, making them potentially  
 CC useful for treating rheumatoid arthritis, restenosis and asthma as well  
 CC as for increasing tolerance to transplanted tissues. The potential  
 CC immunosuppressive properties of a ribozyme that cleaves relA mRNA means  
 CC that uses are limited to local delivery, acute indications or ex vivo  
 CC treatment. (Updated on 25-MAR-2003 to correct PI field.)

SQ Sequence 15 BP; 4 A; 5 C; 1 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 15;  
 Best Local Similarity 71.4%; Pred. No. 5.9e+02;  
 Matches 10; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 538 CCCATCTTTGACAA 551  
 Db 1 CCCAUCUUUGACAA 14

RESULT 869  
 AAF50620  
 ID AAF50620 standard; DNA; 15 BP.

XX AC AAF50620;

XX 30-MAR-2001 (first entry)

DE IGF-I oligonucleotide #1580.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

XX OS Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.

XX Example 8; Page 71; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,

CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia

SQ Sequence 15 BP; 2 A; 8 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1103 ACCGGCCCCCTGAC 1116  
 Db 1 ACCGGCCCCCTGAC 14

RESULT 870

AAF50616

ID AAF50616 standard; DNA; 15 BP.

XX AC AAF50616;

XX 30-MAR-2001 (first entry)

DE IGF-I oligonucleotide #1576.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

XX OS Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.

XX Example 8; Page 71; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic

CC disease, kidney disease, hyperproliferation of the inside of blood  
XX vessels or any other hyperplasia  
SQ Sequence 15 BP; 1 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 5.9e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1100 GGTACCGGCCCT 1113  
Db 2 GGTACCGGCCCT 15

RESULT 871  
ABX04015/c  
ID ABX04015 standard; DNA; 15 BP.  
XX  
AC ABX04015;  
XX  
XX  
XX 09-JAN-2003 (first entry)  
XX  
XX Resistance genes mefa & mefe DNA fragment.  
XX  
XX Detection; probe; diagnosis; oral disease; paradontitis; caries; therapy;  
XX polymorphism; virulence factor; antibiotic resistance gene; prognosis;  
XX oral infection; detection; pathogen; coronary heart disease;  
XX diabetic symptom; ss.  
XX Unidentified.  
XX DE20110013-U1.  
XX  
XX 18-OCT-2001.  
XX  
XX 13-MAR-2001; 2001DE-02010013.  
XX  
XX 13-MAR-2001; 2001DE-01012348.  
XX  
XX 13-MAR-2001; 2001DE-02010013.  
XX  
XX (ROET/) ROETGER A.  
XX  
XX WPI; 2001-657777/76.  
XX  
XX  
XX Oligonucleotide array, useful for diagnosing oral diseases, particularly  
XX paradontitis, carries human or microbial reference sequences.  
XX  
XX Claim 10; Page 29; 58pp; German.  
XX  
XX This invention describes a novel nucleotide carrier with probes used for  
XX diagnosis of oral diseases, particularly paradontitis, but also caries,  
XX especially to identify genetic predisposition (as indicated by  
XX polymorphisms) to disease and to identify causative microorganisms or  
XX their associated virulence factors and antibiotic resistance genes, e.g.  
XX for selection of therapy and for prognosis. They are also useful for  
XX research into oral infections. The carriers allow simultaneous detection  
XX of both host and pathogen parameters, providing quickly and simply an  
XX individual's paradontitis profile, including detection of pathogens that  
XX are associated with increased risk of coronary heart diseases and/or  
XX aggravation of diabetic symptoms, and of opportunistic pathogens.  
XX ABX03870-ABX04044 represent DNA fragments used to illustrate the method  
XX of the invention  
XX  
XX Sequence 15 BP; 1 A; 2 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 5.9e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 183 CATAGACAGACCA 196  
Db 14 CATAGACAGACCA 1

RESULT 872  
AAx74928  
ID AAX74928 standard; RNA; 17 BP.  
XX  
AC AAX74928;  
XX  
XX 28-JUL-1999 (first entry)  
XX  
XX Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #456.  
XX  
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
XX KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
XX tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
XX fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
XX foetal liver kinase 1; ss.  
XX  
XX Mus sp.  
XX  
XX WO9715662-A2.  
XX  
XX 01-MAY-1997.  
XX  
XX 25-OCT-1996; 96WO-US017480.  
XX  
XX 26-OCT-1995; 95US-0005974P.  
XX  
XX 11-JAN-1996; 96US-00584040.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX (CHIR ) CHIRON CORP.  
XX  
XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
XX WPI; 1997-259017/23.  
XX  
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
XX stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
XX rheumatoid arthritis, etc., in a human patient.  
XX  
XX Claim 4; Page 168; 218pp; English.  
XX  
XX The present invention describes nucleic acid molecules which modulate the  
XX synthesis, expression and/or stability of a mRNA encoding 1 or more  
XX receptors of vascular endothelial growth factor (VEGF). A patient  
XX (preferably human) having a condition associated with the level of the  
XX fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
XX receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
XX angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
XX treated by administering the nucleic acid molecule or the expression  
XX vector to the patient. AAX67275 to AAX75752 represent specific examples  
XX of nucleic acid molecules from the present invention  
XX  
XX Sequence 17 BP; 4 A; 4 C; 3 G; 0 T; 6 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;  
Best Local Similarity 71.4%; Pred. No. 6.7e+02;  
Matches 10; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 539 CCATCTTTTGACAAG 552  
Db 2 CCAUCUUGACAAG 15

RESULT 873  
AAx71437  
ID AAX71437 standard; RNA; 17 BP.  
XX  
AC AAX71437;  
XX  
XX 28-JUL-1999 (first entry)  
XX  
XX Human KDR VEGF receptor hammerhead ribozyme substrate #449.  
XX

KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
KW foetal liver kinase 1; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO9715662-A2.  
PN  
XX  
XX 01-MAY-1997.  
PD  
XX  
XX 25-OCT-1996; 96WO-US017480.  
PF  
XX  
XX 26-OCT-1995; 95US-0005974P.  
PR  
XX 11-JAN-1996; 96US-00584040.  
PR  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX (CHIR ) CHIRON CORP.  
PA  
XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
PI  
XX WPI; 1997-259017/23.  
XX  
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
XX stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
XX rheumatoid arthritis, etc., in a human patient.  
XX  
XX Claim 4; Page 110; 218pp; English.  
XX  
XX The present invention describes nucleic acid molecules which modulate the  
XX synthesis, expression and/or stability of a mRNA encoding 1 or more  
XX receptors of vascular endothelial growth factor (VEGF). A patient  
XX (preferably human) having a condition associated with the level of the  
XX fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
XX receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
XX angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
XX treated by administering the nucleic acid molecule or the expression  
XX vector to the patient. AAX67275 to AAX75752 represent specific examples  
XX of nucleic acid molecules from the present invention  
XX  
XX Sequence 17 BP; 4 A; 4 C; 6 G; 0 T; 3 U; 0 Other;  
XX  
XX Query Match 0.8%; Score 14; DB 1; Length 17;  
XX Best Local Similarity 85.7%; Pred. No. 6.7e+02;  
XX Matches 12; Conservative 2; Mismatches 0; Indels 0; Gaps 0;  
XX  
Qy 819 GGAGAGTCCTCA 832  
Db 1 GGAGAGUCCUCA 14  
|||||:|||||  
RESULT 874  
AAX74911  
ID AAX74911 standard; RNA; 17 BP.  
XX  
XX AAX74911;  
AC  
XX  
XX 28-JUL-1999 (first entry)  
DT  
XX  
XX Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #439.  
DE  
XX  
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1;  
XX KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
XX tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
XX fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
XX foetal liver kinase 1; ss.  
XX  
XX Mus sp.  
OS  
XX  
XX WO9715662-A2.  
PN  
XX  
XX 01-MAY-1997.  
PD

XX 25-OCT-1996; 96WO-US017480.  
PF  
XX  
XX 26-OCT-1995; 95US-0005974P.  
PR  
XX 11-JAN-1996; 96US-00584040.  
PR  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX (CHIR ) CHIRON CORP.  
PA  
XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
PI  
XX WPI; 1997-259017/23.  
XX  
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
XX stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
XX rheumatoid arthritis, etc., in a human patient.  
XX  
XX Claim 4; Page 168; 218pp; English.  
XX  
XX The present invention describes nucleic acid molecules which modulate the  
XX synthesis, expression and/or stability of a mRNA encoding 1 or more  
XX receptors of vascular endothelial growth factor (VEGF). A patient  
XX (preferably human) having a condition associated with the level of the  
XX fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
XX receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
XX angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
XX treated by administering the nucleic acid molecule or the expression  
XX vector to the patient. AAX67275 to AAX75752 represent specific examples  
XX of nucleic acid molecules from the present invention  
XX  
XX Sequence 17 BP; 1 A; 5 C; 6 G; 0 T; 5 U; 0 Other;  
XX  
XX Query Match 0.8%; Score 14; DB 1; Length 17;  
XX Best Local Similarity 71.4%; Pred. No. 6.7e+02;  
XX Matches 10; Conservative 4; Mismatches 0; Indels 0; Gaps 0;  
XX  
Qy 1033 GACTTGGCCTGCG 1046  
Db 4 GACUUGGCCUCCG 17  
|||||:|||||  
RESULT 875  
AAX74927  
ID AAX74927 standard; RNA; 17 BP.  
XX  
XX AAX74927;  
AC  
XX  
XX 28-JUL-1999 (first entry)  
DT  
XX  
XX Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #455.  
DE  
XX  
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1;  
XX KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
XX tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
XX fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
XX foetal liver kinase 1; ss.  
XX  
XX Mus sp.  
OS  
XX  
XX WO9715662-A2.  
PN  
XX  
XX 01-MAY-1997.  
PD  
XX  
XX 25-OCT-1996; 96WO-US017480.  
PF  
XX  
XX 26-OCT-1995; 95US-0005974P.  
PR  
XX 11-JAN-1996; 96US-00584040.  
PR  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX (CHIR ) CHIRON CORP.  
PA  
XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
PI  
XX  
XX



DR WPI; 1997-259017/23.  
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
PT rheumatoid arthritis, etc., in a human patient.  
XX  
XX  
PS Claim 4; Page 168; 218pp; English.  
XX  
XX The present invention describes nucleic acid molecules which modulate the  
CC synthesis, expression and/or stability of a mRNA encoding 1 or more  
CC receptors of vascular endothelial growth factor (VEGF). A patient  
CC (preferably human) having a condition associated with the level of the  
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
CC treated by administering the nucleic acid molecule or the expression  
CC vector to the patient. AAX7275 to AAX7572 represent specific examples  
CC of nucleic acid molecules from the present invention  
XX  
SQ Sequence 17 BP; 5 A; 4 C; 3 G; 0 T; 5 U; 0 Other;  
Query Match 0.8%; Score 14; DB 1; Length 17;  
Best Local Similarity 71.4%; Pred. No. 6.7e+02;  
Matches 10; Conservative 4; Mismatches 0; Indels 0; Gaps 0;  
QY 539 CCATCTTTGACAAG 552  
DB 3 CCAUCUUGACAAG 16  
RESULT 876  
AAV97498/C  
ID AAV97498 standard; RNA; 17 BP.  
AC AAV97498;  
XX  
XX 17-MAR-1999 (first entry)  
DT  
XX  
XX Human EGF-R target sequence nucleotide position 2416.  
DE  
XX Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;  
KW hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;  
KW cancer; genetic drift; detection; mutation; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO9833893-A2.  
FN  
XX 06-AUG-1998.  
PD  
XX 14-JAN-1998; 98WO-US000730.  
PF  
XX Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;  
KW hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;  
KW cancer; genetic drift; detection; mutation; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO9833893-A2.  
FN  
XX 06-AUG-1998.  
PD  
XX 14-JAN-1998; 98WO-US000730.  
PF  
XX 31-JAN-1997; 97US-0036476P.  
PR  
XX 04-DEC-1997; 97US-00985162.  
PR  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX (UYAS-) UNIV ASTON.  
PA  
XX Akhtar S, Fell P, Mcswiggen JA;  
PI  
XX WPI; 1998-437449/37.  
DR  
XX Enzymatic nucleic acids - which cleave RNA derived from an epidermal  
PT growth factor receptor, useful for inhibiting cell proliferation and for  
PT treating cancers.  
PT  
XX  
XX Claim 5; Page 73; 109pp; English.  
PS  
XX The present invention describes enzymatic nucleic acid molecules (NAMS)  
CC which specifically cleave RNA derived from an epidermal growth factor  
CC receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090  
CC represent specifically claimed target sequence from human EGF-R. AAV98044  
CC to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and  
CC hairpin ribozymes respectively for human EGF-R. The NAMS are useful for  
CC cleaving EGF-R RNA in the treatment of a condition associated with EGFR  
CC expression levels e.g. to inhibit cell proliferation in the prevention or  
CC treatment of cancers. The NAMS can also be used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of EGF-R RNA in a cell  
XX  
SQ Sequence 17 BP; 5 A; 4 C; 3 G; 0 T; 5 U; 0 Other;  
Query Match 0.8%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 6.7e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1366 CTTGATAGCGACGG 1379  
DB 14 CTTGATAGCGACGG 1  
RESULT 877  
AAV97497/C  
ID AAV97497 standard; RNA; 17 BP.  
XX  
XX AAV97497;  
AC AAV97497;  
XX  
XX 17-MAR-1999 (first entry)  
DT  
XX  
XX Human EGF-R target sequence nucleotide position 2412.  
DE  
XX Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;  
KW hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;  
KW cancer; genetic drift; detection; mutation; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO9833893-A2.  
FN  
XX 06-AUG-1998.  
PD  
XX 14-JAN-1998; 98WO-US000730.  
PF  
XX 31-JAN-1997; 97US-0036476P.  
PR  
XX 04-DEC-1997; 97US-00985162.  
PR  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX (UYAS-) UNIV ASTON.  
PA  
XX Akhtar S, Fell P, Mcswiggen JA;  
PI  
XX WPI; 1998-437449/37.  
DR  
XX Enzymatic nucleic acids - which cleave RNA derived from an epidermal  
PT growth factor receptor, useful for inhibiting cell proliferation and for  
PT treating cancers.  
PT  
XX  
XX Claim 5; Page 73; 109pp; English.  
PS  
XX The present invention describes enzymatic nucleic acid molecules (NAMS)  
CC which specifically cleave RNA derived from an epidermal growth factor  
CC receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090  
CC represent specifically claimed target sequence from human EGF-R. AAV98044  
CC to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and

CC hairpin ribozymes respectively for human EGF-R. The NAMS are useful for  
CC cleaving EGF-R RNA in the treatment of a condition associated with EGFR  
CC expression levels e.g. to inhibit cell proliferation in the prevention or  
CC treatment of cancers. The NAMS can also be used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of EGF-R RNA in a cell  
XX  
SQ Sequence 17 BP; 5 A; 5 C; 4 G; 0 T; 3 U; 0 Other;  
Query Match 0.8%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 6.7e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1366 CTTGATAGCGACGG 1379  
DB 14 CTTGATAGCGACGG 1  
RESULT 877  
AAV97497/C  
ID AAV97497 standard; RNA; 17 BP.  
XX  
XX AAV97497;  
AC AAV97497;  
XX  
XX 17-MAR-1999 (first entry)  
DT  
XX  
XX Human EGF-R target sequence nucleotide position 2412.  
DE  
XX Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;  
KW hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;  
KW cancer; genetic drift; detection; mutation; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO9833893-A2.  
FN  
XX 06-AUG-1998.  
PD  
XX 14-JAN-1998; 98WO-US000730.  
PF  
XX 31-JAN-1997; 97US-0036476P.  
PR  
XX 04-DEC-1997; 97US-00985162.  
PR  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX (UYAS-) UNIV ASTON.  
PA  
XX Akhtar S, Fell P, Mcswiggen JA;  
PI  
XX WPI; 1998-437449/37.  
DR  
XX Enzymatic nucleic acids - which cleave RNA derived from an epidermal  
PT growth factor receptor, useful for inhibiting cell proliferation and for  
PT treating cancers.  
PT  
XX  
XX Claim 5; Page 73; 109pp; English.  
PS  
XX The present invention describes enzymatic nucleic acid molecules (NAMS)  
CC which specifically cleave RNA derived from an epidermal growth factor  
CC receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090  
CC represent specifically claimed target sequence from human EGF-R. AAV98044  
CC to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and  
CC hairpin ribozymes respectively for human EGF-R. The NAMS are useful for  
CC cleaving EGF-R RNA in the treatment of a condition associated with EGFR  
CC expression levels e.g. to inhibit cell proliferation in the prevention or  
CC treatment of cancers. The NAMS can also be used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of EGF-R RNA in a cell  
XX  
SQ Sequence 17 BP; 4 A; 6 C; 2 G; 0 T; 5 U; 0 Other;  
Query Match 0.8%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 6.7e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1367 TTGATAGCGACGGG 1380  
 Db 17 TTGATAGCGACGGG 4

RESULT 878  
 ABK02332  
 ID ABK02332 standard; RNA; 17 BP.  
 XX AC ABK02332;  
 XX DT 12-MAR-2002 (first entry)  
 XX DE Human NOGO Amberzyme #4.  
 XX  
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 FN WO200159103-A2.  
 XX  
 PD 16-AUG-2001.  
 XX  
 XX 09-FEB-2001; 2001WO-US0004273.  
 XX  
 PR 11-FEB-2000; 2000US-0181797P.  
 PR 28-FEB-2000; 2000US-0185516P.  
 PR 06-MAR-2000; 2000US-0187128P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWRIRA B M.  
 XX  
 PI Blatt L, Mcswiggen J, Chowrira BM;  
 XX WPI; 2001-607195/69.  
 XX  
 PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.  
 XX  
 PS Claim 88; Page 130; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates  
 expression of a CD20 gene and a nucleic acid molecule which down  
 regulates expression of a neurite growth inhibitor gene (NOGO). The  
 nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 DNazyme), an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
 possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
 an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
 with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
 of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
 Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 the cell and treat a patient having a condition associated with the level  
 of CD20. The treatment may further comprise the use of one or more  
 therapies. In particular, the CD20 targeting nucleic acid may be used to  
 treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic

CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopenia, and inflammatory arthropathy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an amberzyme molecule of the invention  
 XX  
 SQ Sequence 17 BP; 1 A; 8 C; 6 G; 0 T; 2 U; 0 Other;  
 Query Match 0.8%; Score 14; DB 1; Length 17;  
 Best Local Similarity 85.7%; Pred. NO. 6.7e+02;  
 Matches 12; Conservative 2; Mismatches 0; Indels 0; Gaps 0;  
 QY 83 CCGCGGCTCTGAG 96  
 Db 4 CCGCGGCTCTGAG 17  
 RESULT 879  
 ABK01785  
 ID ABK01785 standard; RNA; 17 BP.  
 XX AC ABK01785;  
 XX DT 12-MAR-2002 (first entry)  
 XX DE Human NOGO Zinzyme #107.  
 XX  
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 FN WO200159103-A2.  
 XX  
 PD 16-AUG-2001.  
 XX  
 XX 09-FEB-2001; 2001WO-US0004273.  
 XX  
 PR 11-FEB-2000; 2000US-0181797P.  
 PR 28-FEB-2000; 2000US-0185516P.  
 PR 06-MAR-2000; 2000US-0187128P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWRIRA B M.  
 XX  
 PI Blatt L, Mcswiggen J, Chowrira BM;  
 XX WPI; 2001-607195/69.  
 XX

PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
PT constructs, which down regulate expression of a CD20 gene or neurite  
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
PT central nervous system injury.

PS Claim 88; Page 97; 200pp; English.

XX The invention relates to a nucleic acid molecule which down regulates  
XX expression of a CD20 gene and a nucleic acid molecule which down  
XX regulates expression of a neurite growth inhibitor gene (NIGO). The  
XX nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
XX DNAzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
XX possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
XX an amberzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA  
XX with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
XX of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
XX Furthermore, it may be contacted with a cell to reduce CD20 activity of  
XX the cell and treat a patient having a condition associated with the level  
XX of CD20. The treatment may further comprise the use of one or more  
XX therapies. In particular, the CD20 targeting nucleic acid may be used to  
XX treat lymphoma, leukemia, B-cell lymphoma, low-grade or follicular non-  
XX Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
XX leukemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
XX lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
XX immune thrombocytopaenia, and inflammatory arthropathy. The NIGO-  
XX targeting nucleic acid is used to cleave RNA of the NIGO gene in the  
XX presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
XX nucleic acid may be contacted with a cell to reduce NIGO activity of the  
XX cell and treat a patient having a condition associated with the level of  
XX NIGO. The treatment may further comprise the use of one or more  
XX therapies. In particular, the NIGO-targeting nucleic acid may be used to  
XX treat central nervous system (CNS) injury and cerebrovascular accident  
XX (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
XX chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
XX Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
XX disease, muscular dystrophy, and/or other neurodegenerative disease  
XX states which respond to the modulation of NIGO expression. The present  
XX sequence is a zinczyme molecule of the invention

SQ Sequence 17 BP; 2 A; 7 C; 6 G; 0 T; 2 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;  
Best Local Similarity 85.7%; Pred. No. 6.7e+02;  
Matches 12; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 83 CCGCGCGCTCTGAG 96  
DB 3 CCGCGCGCUCUGAG 16

RESULT 880

ID ASK00760 standard; RNA; 17 BP.

XX ASK00760;

DT 12-MAR-2002 (first entry)

DE Human NIGO Inozyme #30.

XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
XX cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
XX muscular; CD20; neurite growth inhibitor gene; NIGO; hammerhead ribozyme;  
XX DNAzyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukemia;  
XX B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukemia;  
XX human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
XX MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
XX inflammatory arthropathy; central nervous system injury;  
XX cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
XX chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
XX Parkinson's disease; ataxia; Huntington's disease;  
XX Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

OS Homo sapiens.

OS Synthetic.

PN WO200159103-A2.

XX 16-AUG-2001.

PF 09-FEB-2001; 2001WO-US004273.

XX 11-FEB-2000; 2000US-0181797P.

PR 28-FEB-2000; 2000US-0185516P.

PR 06-MAR-2000; 2000US-0187128P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J.

PA (CHOW/) CHOWRIRA B M.

XX Blatt L, Mcswiggen J, Chowrira BM;

XX WPI; 2001-607195/69.

XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
XX constructs, which down regulate expression of a CD20 gene or neurite  
XX growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
XX central nervous system injury.

XX Claim 88; Page 78; 200pp; English.

XX The invention relates to a nucleic acid molecule which down regulates  
XX expression of a CD20 gene and a nucleic acid molecule which down  
XX regulates expression of a neurite growth inhibitor gene (NIGO). The  
XX nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
XX DNAzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
XX possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
XX an amberzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA  
XX with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
XX of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
XX Furthermore, it may be contacted with a cell to reduce CD20 activity of  
XX the cell and treat a patient having a condition associated with the level  
XX of CD20. The treatment may further comprise the use of one or more  
XX therapies. In particular, the CD20 targeting nucleic acid may be used to  
XX treat lymphoma, leukemia, B-cell lymphoma, low-grade or follicular non-  
XX Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
XX leukemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
XX lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
XX immune thrombocytopaenia, and inflammatory arthropathy. The NIGO-  
XX targeting nucleic acid is used to cleave RNA of the NIGO gene in the  
XX presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
XX nucleic acid may be contacted with a cell to reduce NIGO activity of the  
XX cell and treat a patient having a condition associated with the level of  
XX NIGO. The treatment may further comprise the use of one or more  
XX therapies. In particular, the NIGO-targeting nucleic acid may be used to  
XX treat central nervous system (CNS) injury and cerebrovascular accident  
XX (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
XX chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
XX Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
XX disease, muscular dystrophy, and/or other neurodegenerative disease  
XX states which respond to the modulation of NIGO expression. The present  
XX sequence is an inozyme of the invention

SQ Sequence 17 BP; 2 A; 7 C; 6 G; 0 T; 2 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;  
Best Local Similarity 85.7%; Pred. No. 6.7e+02;  
Matches 12; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 83 CCGCGCGCTCTGAG 96  
DB 1 CCGCGCGCUCUGAG 14

RESULT 881

ABL46440/c  
ID ABL46440 standard; RNA; 17 BP.  
AC ABL46440;  
XX  
XX  
DT 27-JUN-2003 (first entry)  
XX  
XX  
DE Human GRID hammerhead ribozyme substrate oligonucleotide #73.  
XX  
XX  
KW Human; Grb2-related with Insert Domain; GRID; T-cell;  
KW co-stimulatory adaptor protein; tissue rejection; graft rejection;  
KW leukaemia; cytostatic; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200162911-A2.  
PN  
XX  
XX  
PD 30-AUG-2001.  
XX  
XX  
PF 23-FEB-2001; 2001WO-US005957.  
XX  
XX  
PR 24-FEB-2000; 2000US-0184594P.  
XX  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (GLAX ) GLAXO GROUP LTD.  
XX  
XX  
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;  
XX  
XX WPI; 2001-550088/61.  
DR  
XX  
XX  
PT New nucleic acid(s) for regulating the Grb2-related with Insert Domain  
PT (GRID) gene comprises using antisense and enzymatic nucleic acid  
PT molecules such as hammerhead ribozymes.  
XX  
XX  
PS Claim 4; Page 60; 108pp; English.  
XX  
XX  
CC The present invention relates to oligonucleotides that downregulate the  
CC expression of human Grb2-related with Insert Domain (GRID) gene. GRID is  
CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful  
CC for modulating the expression of GRID, to treat conditions such as  
CC tissue/graft rejection and leukaemia. The oligonucleotides can also be  
CC administered in conjunction with other therapies such as radiation,  
CC chemotherapy and cyclosporin treatment. The present oligonucleotide was  
CC used to illustrate the invention  
XX  
SQ Sequence 17 BP; 5 A; 6 C; 1 G; 0 T; 5 U; 0 Other;  
Query Match 0.8%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 6.7e-02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Oy 598 TTGGGAAACTGGA 611  
Db 16 TTGGGAAACTGGA 3  
RESULT 882  
ABL46441/c  
ID ABL46441 standard; RNA; 17 BP.  
XX  
XX  
AC ABL46441;  
XX  
XX  
DT 27-JUN-2003 (first entry)  
XX  
XX  
DE Human GRID hammerhead ribozyme substrate oligonucleotide #74.  
XX  
XX  
KW Human; Grb2-related with Insert Domain; GRID; T-cell;  
KW co-stimulatory adaptor protein; tissue rejection; graft rejection;  
KW leukaemia; cytostatic; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200162911-A2.  
PN

XX  
PD 30-AUG-2001.  
XX  
XX  
PF 23-FEB-2001; 2001WO-US005957.  
XX  
XX  
PR 24-FEB-2000; 2000US-0184594P.  
XX  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (GLAX ) GLAXO GROUP LTD.  
XX  
XX  
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;  
XX  
XX WPI; 2001-550088/61.  
DR  
XX  
XX  
PT New nucleic acid(s) for regulating the Grb2-related with Insert Domain  
PT (GRID) gene comprises using antisense and enzymatic nucleic acid  
PT molecules such as hammerhead ribozymes.  
XX  
XX  
PS Claim 4; Page 60; 108pp; English.  
XX  
XX  
CC The present invention relates to oligonucleotides that downregulate the  
CC expression of human Grb2-related with Insert Domain (GRID) gene. GRID is  
CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful  
CC for modulating the expression of GRID, to treat conditions such as  
CC tissue/graft rejection and leukaemia. The oligonucleotides can also be  
CC administered in conjunction with other therapies such as radiation,  
CC chemotherapy and cyclosporin treatment. The present oligonucleotide was  
CC used to illustrate the invention  
XX  
SQ Sequence 17 BP; 5 A; 5 C; 2 G; 0 T; 5 U; 0 Other;  
Query Match 0.8%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 6.7e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Oy 598 TTGGGAAACTGGA 611  
Db 15 TTGGGAAACTGGA 2  
RESULT 883  
ABL46442/c  
ID ABL46442 standard; RNA; 17 BP.  
XX  
XX  
AC ABL46442;  
XX  
XX  
DT 27-JUN-2003 (first entry)  
XX  
XX  
DE Human GRID hammerhead ribozyme substrate oligonucleotide #75.  
XX  
XX  
KW Human; Grb2-related with Insert Domain; GRID; T-cell;  
KW co-stimulatory adaptor protein; tissue rejection; graft rejection;  
KW leukaemia; cytostatic; ss.  
XX  
XX  
OS Homo sapiens.  
XX  
XX  
PN WO200162911-A2.  
XX  
XX  
PD 30-AUG-2001.  
XX  
XX  
PF 23-FEB-2001; 2001WO-US005957.  
XX  
XX  
PR 24-FEB-2000; 2000US-0184594P.  
XX  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (GLAX ) GLAXO GROUP LTD.  
XX  
XX  
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;  
XX  
XX WPI; 2001-550088/61.  
DR  
XX  
XX  
PT New nucleic acid(s) for regulating the Grb2-related with Insert Domain  
PT (GRID) gene comprises using antisense and enzymatic nucleic acid

PT molecules such as hammerhead ribozymes.

XX Claim 4; Page 60; 108pp; English.

PS The present invention relates to oligonucleotides that downregulate the

CC expression of human Grb2-related with Insert Domain (GRID) gene. GRID is

CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful

CC for modulating the expression of GRID, to treat conditions such as

CC tissue/graft rejection and leukaemia. The oligonucleotides can also be

CC administered in conjunction with other therapies such as radiation,

CC chemotherapy and cyclosporin treatment. The present oligonucleotide was

XX used to illustrate the invention

SQ Sequence 17 BP; 4 A; 5 C; 3 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;

Best Local Similarity 100.0%; Pred. No. 6.7e+02;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 598 TTTGGGAACCTGGA 611

DB 14 TTTGGGAACCTGGA 1

RESULT 884

ABS75015

ID ABS75015 standard; DNA; 17 BP.

XX AC

XX ABS75015;

XX 24-DEC-2002 (first entry)

XX Human PAPP-Ea associated 17-mer SEQ ID 541.

XX PAPP-E; human; pregnancy associated plasma protein E; abortive;

XX contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;

XX dysgenetic pregnancy; primer; ss.

XX Homo sapiens.

XX US2002102252-A1.

XX 01-AUG-2002.

XX 06-APR-2001; 2001US-00827998.

XX 26-MAY-2000; 2000US-0207456P.

XX (GUY/) GU Y.

XX (SHAN/) SHANNON M E.

XX Gu Y, Shannon ME;

XX WPI; 2002-697817/75.

XX New isolated nucleic acid encoding an isoform of human pregnancy

XX associated plasma protein E, for preventing or aborting pregnancy.

XX Example 2; Page 146; 353pp; English.

XX This invention describes a novel isolated nucleic acid that encodes one

XX of three new isoforms of human pregnancy associated plasma protein E,

XX hPAPP-E. The products of the invention have abortive and contraceptive

XX activity and can be used for gene therapy or in a vaccine. The nucleic

XX acid, polypeptide encoded by it, or antibody to the polypeptide can be

XX used in pharmaceutical compositions or vaccines for preventing or

XX aborting pregnancy. PAPP-E is used in the antenatal diagnosis of

XX dysgenetic pregnancies. The nucleic acids are used as probes to assess

XX the level of PAPP-E isoform mRNA in chorionic villus samples, and the

XX antibodies can be used to assess the expression levels of PAPP-E isoform

XX proteins in chorionic villus samples, to diagnose dysgenetic pregnancies

XX antenatally. This sequence represents an oligomer used in scanning the

XX human PAPP-E genes described in the disclosure of the invention

XX SQ Sequence 17 BP; 4 A; 4 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;

Best Local Similarity 100.0%; Pred. No. 6.7e+02;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 287 AACTTCGTTCTGCA 300

DB 4 AACTTCGTTCTGCA 17

RESULT 885

ABS75016

ID ABS75016 standard; DNA; 17 BP.

XX AC

XX ABS75016;

XX 24-DEC-2002 (first entry)

XX Human PAPP-Ea associated 17-mer SEQ ID 542.

XX PAPP-E; human; pregnancy associated plasma protein E; abortive;

XX contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;

XX dysgenetic pregnancy; primer; ss.

XX Homo sapiens.

XX US2002102252-A1.

XX 01-AUG-2002.

XX 06-APR-2001; 2001US-00827998.

XX 26-MAY-2000; 2000US-0207456P.

XX (GUY/) GU Y.

XX (SHAN/) SHANNON M E.

XX Gu Y, Shannon ME;

XX WPI; 2002-697817/75.

XX New isolated nucleic acid encoding an isoform of human pregnancy

XX associated plasma protein E, for preventing or aborting pregnancy.

XX Example 2; Page 146; 353pp; English.

XX This invention describes a novel isolated nucleic acid that encodes one

XX of three new isoforms of human pregnancy associated plasma protein E,

XX hPAPP-E. The products of the invention have abortive and contraceptive

XX activity and can be used for gene therapy or in a vaccine. The nucleic

XX acid, polypeptide encoded by it, or antibody to the polypeptide can be

XX used in pharmaceutical compositions or vaccines for preventing or

XX aborting pregnancy. PAPP-E is used in the antenatal diagnosis of

XX dysgenetic pregnancies. The nucleic acids are used as probes to assess

XX the level of PAPP-E isoform mRNA in chorionic villus samples, and the

XX antibodies can be used to assess the expression levels of PAPP-E isoform

XX proteins in chorionic villus samples, to diagnose dysgenetic pregnancies

XX antenatally. This sequence represents an oligomer used in scanning the

XX human PAPP-E genes described in the disclosure of the invention

XX SQ Sequence 17 BP; 4 A; 4 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;

Best Local Similarity 100.0%; Pred. No. 6.7e+02;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 287 AACTTCGTTCTGCA 300

DB 3 AACTTCGTTCTGCA 16

## RESULT 886

AAD46160  
 ID AAD46160 standard; DNA; 17 BP.  
 XX  
 AC AAD46160;  
 XX  
 XX  
 DT 29-AUG-2003 (revised)  
 DT 27-DEC-2002 (first entry)  
 XX  
 DE 3900 PCR primer, to clone T. reesei L-arabinitol 4-dehydrogenase gene.  
 XX  
 XX Genetically modified fungus; L-arabinose; L-arabinitol 4-dehydrogenase;  
 KW EC 1.1.1.12; L-xylulose reductase; EC 1.1.1.10; agricultural product;  
 XX biomass; lactic acid; xylitol; forestry product; fermentable sugar;  
 KW ethanol; enzyme; PCR; primer; ss.  
 XX  
 OS Hypocrea jecorina.  
 XX  
 XX WO200266616-A2.  
 PN  
 XX  
 PD 29-AUG-2002.  
 XX  
 XX 15-FEB-2002; 2002WO-FI000125.  
 PF  
 XX 16-FEB-2001; 2001FI-00000308.  
 PR  
 XX (VALW ) VALTION TEKNIILLINEN TUTKIMUSKESKUS.  
 PA  
 XX Lonsborough J, Penttilae M, Richard P;  
 PI  
 XX WPI; 2002-691618/74.  
 DR  
 XX Genetically modified fungus for producing useful products such as  
 PT ethanol, lactic acid and xylitol, from biomass containing L-arabinose,  
 PT has increased ability to utilize L-arabinose.  
 PT  
 XX Example 2; Page 14; 32pp; English.  
 PS  
 XX The invention relates to genetically modified fungus with an increased  
 CC ability to utilize L-arabinose, where the fungus has been transformed  
 CC with a DNA sequence encoding an L-arabinitol 4-dehydrogenase (EC 1.1.1.  
 CC 1.12) or L-xylulose reductase (EC 1.1.1.10) or both the DNA sequences.  
 CC Genetically modified fungus is useful for producing useful products from  
 CC biomass containing L-arabinose. The useful product include ethanol,  
 CC lactic acid or xylitol preferably ethanol. It is also useful to ferment a  
 CC carbon source such as biomass comprising agricultural or forestry  
 CC products and waste products containing L-arabinose and also other  
 CC pentoses or other fermentable sugars. The present sequence is a PCR  
 CC primer used to clone T. reesei L-arabinitol 4-dehydrogenase gene.  
 CC (Updated on 29-AUG-2003 to standardise OS field)  
 XX  
 SQ Sequence 17 BP; 5 A; 1 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 6.7e+02;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 8 AGCGTAAAGGATGG 21  
 DB 2 AGCGTAAAGGATGG 15

## RESULT 887

ABT36202  
 ID ABT36202 standard; DNA; 17 BP.  
 XX  
 AC ABT36202;  
 XX  
 XX 12-JUN-2003 (first entry)  
 DT  
 XX Tumour suppression related human fukutin oligo SEQ ID No 1839.  
 DE  
 XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
 KW

KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
 KW schizophrenia; protein chip; gene therapy; tumour suppression;  
 KW human fukutin; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003025175-A2.  
 XX  
 XX 27-MAR-2003.  
 PD  
 XX 17-SEP-2002; 2002WO-IB004208.  
 PF  
 XX 17-SEP-2001; 2001PR-00011978.  
 PR  
 XX (MOLEB-) MOLECULAR ENGINES LAB.  
 PA  
 XX  
 XX Telexman A, Amson R, Tuijnder M;  
 FI  
 XX WPI; 2003-313353/30.  
 DR  
 XX New isolated nucleic acid, useful for treating viral diseases associated  
 PT with tumors and cell degeneration, also related polypeptides, antibodies  
 PT and transfected cells.  
 PT  
 XX Disclosure; Page 248; 720pp; French.  
 PS  
 XX The invention relates to a novel isolated 17 mer nucleic acid sequence,  
 CC given in the specification, a sequence containing at least 15 consecutive  
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that  
 CC hybridizes to them under highly stringent conditions, or the complement  
 CC of any of them, or the corresponding RNA. The novel isolated nucleic  
 CC acids of the invention are useful as probes and primers for detecting,  
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
 CC component of a gene chip, in vitro as (anti)sense reagents, and for  
 CC production of recombinant polypeptides. Any of the nucleic acids,  
 CC polypeptides, vectors containing the nucleic acids, cells containing the  
 CC vector or antibodies directed against the polypeptides are useful for  
 CC preparation of pharmaceuticals for prevention and/or treatment of viral  
 CC diseases that are characterised by development of tumours or cell  
 CC degeneration, specifically cancer but also Alzheimer's disease and  
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
 CC patient samples is useful for diagnosis and/or prognosis of these  
 CC diseases. The polypeptides can also be used to generate antibodies, and  
 CC both the polypeptide and antibodies are useful as components of protein  
 CC chips. The nucleic acid sequences of the invention can be used in gene  
 CC therapy. This polynucleotide sequence represents a tumour suppression  
 CC related human fukutin oligonucleotide of the invention  
 XX  
 SQ Sequence 17 BP; 4 A; 6 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 6.7e+02;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1573 TCAGGCAGGCCAGC 1586  
 DB 3 TCAGGCAGGCCAGC 16

## RESULT 888

ACA06338  
 ID ACA06338 standard; RNA; 17 BP.  
 XX  
 AC ACA06338;  
 XX  
 XX 03-JUN-2003 (first entry)  
 DT  
 XX NFkB sub-unit modulating inozyme substrate #157.  
 DE  
 XX Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;  
 KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;  
 KW lung cancer; prostate cancer; colorectal cancer; brain cancer;

oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;  
cervical cancer; head and neck cancer; ovarian cancer; melanoma;  
lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;  
chemotherapy; paclitaxel docetaxel; cisplatin; methotrexate;  
cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;  
gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;  
rheumatoid arthritis; restenosis; Crohn's disease; ischaemia;  
gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;  
transplant/graft rejection; reperfusion injury; glomerulonephritis;  
allergic airway inflammation; inflammatory bowel disease; infection; ss.

Homo sapiens.

US2002177568-A1.

28-NOV-2002.

23-MAY-2001; 2001US-00864785.

07-DEC-1992; 92US-00987132.

18-MAY-1994; 94US-00245466.

15-AUG-1994; 94US-00291932.

23-DEC-1996; 96US-00777916.

(STIN/) STINCHOMB D T.

(MCSW/) MCSWIGGEN J.

(DRAP/) DRAPER K G.

Stinchcomb DT, Mcswiggen J, Draper KG;

WPI; 2003-340953/32.

Novel enzymatic nucleic acid molecules which down regulates expression of  
a sequence encoding a subunit of nuclear factor kappa B useful for  
treating cancer, inflammatory disorders and autoimmune diseases.

Claim 3; Page 29; 72pp; English.

The invention describes an enzymatic nucleic acid molecule (I) which down  
regulates expression of a sequence encoding a subunit of nuclear factor  
kappa B (NFkB), where (I) is an inozyme, zynzyme, g-cleaver or amberzyme  
configuration. The enzymatic nucleic acid molecule is adapted to treat  
cancer and is useful for down-regulating REL-A activity in a cell, for  
treating a patient having a condition associated with the level of REL-A.  
(I) is useful for cleaving RNA comprising a sequence of REL-A gene, in  
the presence of a divalent cation, especially Mg<sup>2+</sup>. The enzymatic and  
antisense nucleic acid molecules are useful for treating breast, lung,  
prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,  
cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or  
multidrug resistant cancer. The method involves use of other drug  
therapies such as monoclonal antibodies, REL-A-specific inhibitors or  
chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,  
cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,  
gemcitabine or radiation therapy. The enzymatic and antisense nucleic  
acid molecules are also useful for treating inflammatory disease such as  
rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,  
obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft  
rejection, gene therapy applications, ischaemia/reperfusion injury  
(central nervous system (CNS) and myocardial), glomerulonephritis,  
sepsis, allergic airway inflammation, inflammatory bowel disease or  
infection. This sequence represents the substrate of a novel enzymatic  
nucleic acid molecule

Sequence 17 BP; 5 A; 5 C; 1 G; 0 T; 6 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;

Best Local Similarity 71.4%; Pred. No. 6.7e+02;

Matches 10; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 538 CCCATCTTTGACAA 551

|||||:|||||

3 CCCCAUUCUUGACAA 16

Db

RESULT 889

ABZ61324

ID ABZ61324 standard; RNA; 17 BP.

XX AC ABZ61324;

XX DT 21-MAR-2003 (first entry)

XX DB Human H-Ras DNazyme target #115.

XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;

XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;

XX KW anti-rheumatic; cancer; AIDS; ss.

XX OS Homo sapiens.

XX PN WO200297114-A2.

XX PD 05-DEC-2002.

XX PF 29-MAY-2002; 2002WO-US016840.

XX PR 29-MAY-2001; 2001US-0294140P.

XX PR 06-JUN-2001; 2001US-0296249P.

XX PR 10-SEP-2001; 2001US-0318471P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PI Mcswiggen J;

XX WPI; 2003-140484/13.

XX PT Novel short interfering RNA and enzymatic nucleic acid useful for

XX PT treating cancer, modulates the expression of a nucleic acid encoding

XX PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

XX PS Claim 58; Page 113; 185pp; English.

XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic

XX CC acid molecule or an enzymatic nucleic acid molecule, that modulates

XX CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,

XX CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic

XX CC acid molecule of the invention has cytostatic, anti-HIV, and anti-

XX CC rheumatic activity. The nucleic acid molecules are useful for reducing

XX CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are

XX CC also useful for treating breast, ovarian, colorectal, lung, prostate,

XX CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences

XX CC shown in ABZ65989 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,

XX CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human

XX CC ribozymes of the invention

XX SQ Sequence 17 BP; 2 A; 11 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;

Best Local Similarity 100.0%; Pred. No. 6.7e+02;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 103 CGCGCGCGCGCGCGCC 116

|||||:|||||

4 CGCGCGCGCGCGCGCC 17

Db

RESULT 890

ABZ62179/c

ID ABZ62179 standard; RNA; 17 BP.

XX AC ABZ62179;

XX DT 21-MAR-2003 (first entry)

XX DE Human H-Ras DNazyme target #970.

XX



KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
 KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;  
 KW anti-rheumatic; cancer; AIDS; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200297114-A2.  
 XX  
 XX PD 05-DEC-2002.  
 XX  
 XX PF 29-MAY-2002; 2002WO-US016840.  
 XX  
 XX PR 29-MAY-2001; 2001US-0294140P.  
 XX  
 XX PR 06-JUN-2001; 2001US-0296249P.  
 XX  
 XX PR 10-SEP-2001; 2001US-0318471P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 XX  
 XX PI Mcswiggen J;  
 XX  
 XX DR WPI; 2003-140484/13.  
 XX  
 XX PT Novel short interfering RNA and enzymatic nucleic acid useful for  
 PT treating cancer, modulates the expression of a nucleic acid encoding  
 PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
 XX  
 XX PS Claim 58; Page 131; 185pp; English.  
 XX  
 XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic  
 CC acid molecule or an enzymatic nucleic acid molecule, that modulates  
 CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,  
 CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
 CC acid molecule of the invention has cytostatic, anti-HIV, and anti-  
 CC rheumatic activity. The nucleic acid molecules are useful for reducing  
 CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
 CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
 CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
 CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
 CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human  
 CC ribozymes of the invention  
 XX  
 XX SQ Sequence 17 BP; 2 A; 5 C; 4 G; 0 T; 6 U; 0 Other;  
 Query Match 0.8%; Score 14; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 6.7e+02;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 515 TGGAGAGCTGACC 528  
 DB 17 TGGAGAGCTGACC 4  
 RESULT 891  
 ACF62527  
 ID ACF62527 standard; DNA; 17 BP.  
 XX  
 XX AC ACF62527;  
 XX  
 XX DT 08-OCT-2003 (first entry)  
 XX  
 XX DE Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:356.  
 XX  
 XX KW Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;  
 KW cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;  
 KW cytostatic; PCR primer; ss.  
 XX  
 XX OS Synthetic.  
 XX  
 XX FN WO2003013534-A2.  
 XX  
 XX PD 20-FEB-2003.  
 XX  
 XX PF 23-JUL-2002; 2002WO-EP008219.

XX 23-JUL-2001; 2001EP-00117608.  
 PR 24-MAY-2002; 2002EP-00011710.  
 XX  
 XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
 XX  
 XX PI Heinrich G, Kerb R;  
 XX  
 XX DR WPI; 2003-268144/26.  
 XX  
 XX PT New use of irinotecan for preparation of compositions for treating cancer  
 PT in subject having genome with variant allele comprising cytochrome p450,  
 PT subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.  
 XX  
 XX PS Disclosure; Page 42; 86pp; English.  
 XX  
 XX CC The present invention describes the use of irinotecan (I) or its  
 CC derivative for the preparation of a pharmaceutical composition for  
 CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic  
 CC cancer, or malignant glioma in a subject having a genome with a variant  
 CC allele which comprises a cytochrome p450, subfamily IIIA (nifedipine  
 CC oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have  
 CC cytostatic activity. The therapeutic applications of (I) is improved,  
 CC since it is possible to individually treat a subject with an appropriate  
 CC dosage and/or an appropriate derivative of (I). Therefore, undesirable,  
 CC harmful or toxic effects are efficiently avoided. Unnecessary and  
 CC potentially harmful treatment of those subjects who do not respond to the  
 CC treatment with substances (nonresponders), as well as the development of  
 CC drug resistances due to suboptimal drug dosing can be avoided. ACF62200  
 CC to ACF62751 and ABM34912 to ABM35013 represent sequences used in the  
 CC exemplification of the present invention  
 XX  
 XX SQ Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;  
 Query Match 0.8%; Score 14; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 6.7e+02;  
 Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 52 GCAGTGTGACTGCTGA 67  
 DB 2 GCATGTGACTGCTGA 17  
 RESULT 892  
 ADB21198  
 ID ADB21198 standard; DNA; 17 BP.  
 XX  
 XX AC ADB21198;  
 XX  
 XX DT 20-NOV-2003 (first entry)  
 XX  
 XX DE MRPI based cancer related nucleic acid SEQ ID NO:356.  
 XX  
 XX KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;  
 KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;  
 KW variant allele; multidrug resistance protein 1; MRPI; cytostatic; gene;  
 ds.  
 XX  
 XX OS Unidentified.  
 XX  
 XX FN WO2003013533-A2.  
 XX  
 XX PD 20-FEB-2003.  
 XX  
 XX PF 23-JUL-2002; 2002WO-EP008200.  
 XX  
 XX PR 23-JUL-2001; 2001EP-00117608.  
 PR 24-MAY-2002; 2002EP-00011710.  
 XX  
 XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
 XX  
 XX PI Heinrich G, Kerb R;  
 XX



DR WPI; 2003-354397/33.  
XX  
PT Use of irinotecan or its derivative for preparation of a pharmaceutical  
PT composition for treating cancer in a subject having a genome with a  
PT variant allele comprising a multidrug resistance protein 1  
PT polynucleotide.  
XX  
XX Disclosure; Page 51; 100pp; English.  
XX  
CC The present invention describes a method for the use of irinotecan (I) or  
CC its derivative for the preparation of a pharmaceutical composition for  
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic  
CC cancer, or malignant glioma in a subject having a genome with a variant  
CC allele which comprises a multidrug resistance protein 1 (MRP1)  
CC polynucleotide (II). (I) has cytostatic activity. (I) or its derivative  
CC can be used for the preparation of a pharmaceutical composition for  
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic  
CC cancer, or malignant glioma in a subject, where the subject is a human  
CC (preferably African or Asian) or a mouse. The present sequence represents  
CC a sequence which is used in the exemplification of the present invention.  
XX  
SQ Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;  
  
Query Match 0.8%; Score 14; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 6.7e+02;  
Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 52 GCAGTGTGACTGCTGA 67  
Db 2 GCATGTRACTGCTGA 17  
  
RESULT 893  
ADB88287  
ID ADB88287 standard; DNA; 17 BP.  
XX  
AC ADB88287;  
XX  
DT 04-DEC-2003 (first entry)  
XX  
DE Human UGT1A1 variant allele sequence fragment SEQ ID NO:328.  
XX  
KW ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;  
KW colorectal cancer; cervical cancer; gastric cancer; lung cancer;  
KW ovarian cancer; pancreatic cancer; malignant glioma;  
KW uridine diphosphate glycosyltransferase1 member A1.  
XX  
OS Homo sapiens.  
XX  
PN WO2003013536-A2.  
XX  
PD 20-FEB-2003.  
XX  
PF 23-JUL-2002; 2002WO-EP008217.  
XX  
PR 23-JUL-2001; 2001EP-00117608.  
PR 24-MAY-2002; 2002EP-00011710.  
XX  
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
XX  
PI Heinrich G, Kerb R;  
XX  
DR WPI; 2003-289896/28.  
XX  
PT Use of irinotecan to treat cancer patient by determining if patient has  
PT variant alleles of UGT1A1 gene, administering increased/decreased amounts  
PT of irinotecan based on increased/decreased levels of UGT1A1 gene product.  
XX  
PS Disclosure; Page 55; 107pp; English.  
XX  
CC The invention relates to the novel use of irinotecan to treat a patient  
CC suffering from cancer. This involves determining if the patient has one  
CC or more variant alleles of the UGT1A1 gene, and if the patient has one or

CC more of such variant alleles, irinotecan is administered in an increased  
CC or decreased amount in comparison to the amount that is administered  
CC without regard to the patient's alleles in the UGT1A1 gene. The invention  
CC has cytostatic activity. A composition of the invention acts as a  
CC topoisomerase I inhibitor. The method is useful for treating a patient,  
CC an animal e.g. mouse or a human, preferably African or Asian, suffering  
CC from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,  
CC pancreatic cancer or malignant glioma. The present sequence is used in  
CC the exemplification of the invention.  
XX  
SQ Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;  
  
Query Match 0.8%; Score 14; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 6.7e+02;  
Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 52 GCAGTGTGACTGCTGA 67  
Db 2 GCATGTRACTGCTGA 17  
  
RESULT 894  
ADB97270  
ID ADB97270 standard; DNA; 17 BP.  
XX  
AC ADB97270;  
XX  
DT 04-DEC-2003 (first entry)  
XX  
DE Human MDR1 variant allele sequence fragment SEQ ID NO:356.  
XX  
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;  
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;  
KW multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;  
KW TOP1.  
XX  
OS Homo sapiens.  
XX  
PN WO2003013537-A2.  
XX  
PD 20-FEB-2003.  
XX  
PF 23-JUL-2002; 2002WO-EP008218.  
XX  
PR 23-JUL-2001; 2001EP-00117608.  
PR 24-MAY-2002; 2002EP-00011710.  
XX  
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
XX  
PI Heinrich G, Kerb R;  
XX  
DR WPI; 2003-268145/26.  
XX  
PT New use of irinotecan for preparation of pharmaceutical compositions for  
PT treating cancer in subject having genome with variant allele comprising  
PT multidrug resistance 1 polynucleotide.  
XX  
PS Disclosure; Page 79; 130pp; English.  
XX  
CC The invention relates to the novel use of irinotecan or its derivative  
CC for the preparation of pharmaceutical compositions for treating  
CC colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or  
CC malignant glioma in a subject having a genome with a variant allele which  
CC comprises a multidrug resistance 1 (MDR1) polynucleotide. A composition  
CC of the invention has cytostatic activity. The invention is useful for the  
CC preparation of pharmaceutical compositions for treating colorectal,  
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant  
CC glioma in a subject (preferably human, more preferably African or Asian)  
CC or a mouse. The present sequence is used in the exemplification of the  
CC invention.  
XX  
SQ Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 6.7e+02;  
Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 52 GCAGTGTGACTGCTGA 67  
|||:||||:|||||  
Db 2 GCAATGTACTGCTGA 17

RESULT 895  
ADB92461  
ID ADB92461 standard; DNA; 17 BP.  
AC ADB92461;  
XX  
DT  
XX  
XX  
DE Human MDR1 variant allele sequence fragment SEQ ID NO:356.  
XX  
XX irinotecan; colorectal cancer; cervical cancer; gastric cancer;  
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;  
KW multidrug resistance 1; MDR1; cytosolic; ds; human; UGT1A1; MRP1; TOP1.  
XX  
XX Homo sapiens.  
XX  
XX WO2003013535-A2.  
XX  
PD 20-FEB-2003.  
XX  
PF 23-JUL-2002; 2002WO-EP008220.  
XX  
PR 23-JUL-2001; 2001EP-00117608.  
PR 24-MAY-2002; 2002EP-00011710.  
XX  
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
PA  
PI Heinrich G, Kerb R;  
XX  
XX WPI; 2003-342400/32.  
DR  
XX  
XX New use of irinotecan for preparation of pharmaceutical compositions for  
PT treating cancer in subject having genome with variant allele comprising  
PT multidrug resistance 1 polynucleotide.  
XX  
XX Disclosure; Page 50; 104pp; English.  
XX  
XX The invention relates to a novel use of irinotecan or its derivative for  
CC the preparation of a pharmaceutical composition for treating colorectal,  
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant  
CC glioma in a subject having a genome with a variant allele which comprises  
CC a multidrug resistance 1 (MDR1) polynucleotide. A composition of the  
CC invention has cytostatic activity. The present sequence is used in the  
CC exemplification of the invention.  
XX  
XX Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 6.7e+02;  
Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 52 GCAGTGTGACTGCTGA 67  
|||:||||:|||||  
Db 2 GCAATGTACTGCTGA 17

RESULT 896  
AAX71742  
ID AAX71742 standard; RNA; 18 BP.  
XX  
AC AAX71742;  
XX  
XX  
DT 28-JUL-1999 (first entry)  
XX

DE Human KDR VEGF receptor hairpin ribozyme substrate #40.  
XX  
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
KW KDR; hamsterhead ribozyme; hairpin ribozyme; cleavage;  
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
KW foetal liver kinase 1; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
PN WO9715662-A2.  
XX  
XX 01-MAY-1997.  
PD  
XX  
XX 25-OCT-1996; 96WO-US017480.  
PF  
XX 26-OCT-1995; 95US-0005974P.  
PR  
PR 11-JAN-1996; 96US-00584040.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
PA (CHIR) CHIRON CORP.  
XX  
XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
PI  
XX  
XX WPI; 1997-259017/23.  
DR  
XX  
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
PT rheumatoid arthritis, etc., in a human patient.  
XX  
XX Claim 4; Page 120; 218pp; English.  
XX  
XX The present invention describes nucleic acid molecules which modulate the  
CC synthesis, expression and/or stability of a mRNA encoding 1 or more  
CC receptors of vascular endothelial growth factor (VEGF). A patient  
CC (preferably human) having a condition associated with the level of the  
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
CC treated by administering the nucleic acid molecule or the expression  
CC vector to the patient. AAX67275 to AAX75752 represent specific examples  
CC of nucleic acid molecules from the present invention  
XX  
XX Sequence 18 BP; 2 A; 9 C; 1 G; 0 T; 6 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 18;  
Best Local Similarity 64.3%; Pred. No. 7.1e+02;  
Matches 9; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 1701 CTCTCTGCTTACCT 1714  
|:|:|:|:|:|:|:  
Db 2 CUCUCUGCCUACCU 15

RESULT 897  
AAZ41054  
ID AAZ41054 standard; DNA; 18 BP.  
XX  
AC AAZ41054;  
XX  
XX 26-JAN-2000 (first entry)  
DT  
XX  
XX Human ELK-1 phosphorothioate antisense oligonucleotide SEQ ID NO:206.  
XX  
XX Identification; genetic target; gene modulation; human; probe;  
KW antisense oligonucleotide; phosphorothioate; PCR primer;  
KW nucleotide sequence-based technology; antisense drug discovery;  
KW target validation; ss.  
XX  
XX Synthetic.  
OS  
XX Homo sapiens.  
XX  
XX WO9953101-A1.  
PN

```
XX PD 21-OCT-1999.
XX PF 13-APR-1999; 99WO-US008268.
XX PR 13-APR-1998; 98US-0081483P.
XX PR 28-APR-1998; 98US-00067638.
XX PA (ISIS-) ISIS PHARM INC.
XX XX
XX PI Cowseert LM, Baker BF, Mcneil J, Freier SM, Sasnor HM, Brooks DG;
XX PI Ohasi C, Wyatt JR, Borchers AH, Vickers TA;
XX XX
XX DR WPI; 1999-620446/53.
XX XX
XX PT Identifying compounds which modulate expression of nucleic acids, used to
XX PT provide compounds having defined physical, chemical or bioactive
XX PT properties, e.g. antisense activity.
XX XX
XX PS Example 24; Page 104; 264pp; English.
XX XX
XX CC A method has been developed of defining a set of compounds that modulate
XX CC the expression of a target nucleic acid (tNA) sequence via binding of the
XX CC compounds with the tNA sequence. The method comprises generating a
XX CC library of virtual compounds in silico according to defined criteria, and
XX CC evaluating in silico the binding of the virtual compounds with the tNA
XX CC according to defined criteria. Also described are: (1) a method of
XX CC defining a set of oligonucleotides (ONs) that modulate the expression of
XX CC a tNA sequence via binding of the ONs with the tNA sequence comprising
XX CC generating a library of virtual compounds in silico according to defined
XX CC criteria, and evaluating in silico the binding of the virtual ONs with
XX CC the tNA according to defined criteria; and (2) a method of defining a set
XX CC of compounds that modulate the expression of a tNA sequence via binding
XX CC of the compounds with the tNA. The methods can be used for the generation
XX CC and identification of synthetic compounds having defined physical,
XX CC chemical or bioactive properties. Information gathered from assays of
XX CC such compounds is used to identify nucleic acid sequences that are
XX CC tractable to a variety of nucleotide sequence-based technologies, e.g.
XX CC antisense drug discovery and target validation. AA40852 to AA41220, and
XX CC RAY52701 to RAY52706, represent sequences used in the exemplification of
XX CC the present invention
XX XX
XX SQ Sequence 18 BP; 0 A; 2 C; 12 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 14; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.1e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 232 GGTGGTGGTGGCGG 245
Db 1 GGTGGTGGTGGCGG 14
RESULT 898
AAZ06571
ID AAZ06571 standard; DNA; 18 BP.
XX AC AAZ06571;
XX XX
XX DT 23-NOV-1999 (first entry)
XX DE ELK-1 expression modulator #9.
XX XX
XX KW Human ELK-1; p62TCF; Ets domain transcription factor protein; apoptosis;
XX KW expression inhibition; infection; inflammation; tumour formation;
XX KW diagnosis; phosphorothioate; antisense compound; ss.
XX XX
XX OS Synthetic.
XX XX
XX FH Key Location/Qualifiers
XX FT modified_base 1. .18
XX FT /tag= a
XX FT /note= "Internucleoside phosphorothioate linkages"
```

```
FT modified_base 1. .4
FT /tag= b
FT /note= "Optionally 2-methoxyethyl (2'-MOE) nucleosides
FT except cytosine residues which are 5-methylcytosine"
FT 15. .18
FT modified_base c
FT /tag= c
FT /note= "Optionally 2-methoxyethyl (2'-MOE) nucleosides
FT except cytosine residues which are 5-methylcytosine"
XX XX
XX PN US5948680-A.
XX XX
XX XX 07-SEP-1999.
XX XX
XX PF 17-DEC-1998; 98US-00213767.
XX XX
XX PR 17-DEC-1998; 98US-00213767.
XX XX
XX PA (ISIS-) ISIS PHARM INC.
XX XX
XX PI Baker BF, Cowseert LM;
XX XX
XX XX WPI; 1999-517959/43.
XX XX
XX XX Antisense compound useful for diagnosis, treatment and prevention of
XX XX disease associated with ELK-1 expression.
XX PS Claim 3; Col 38; 31pp; English.
XX XX
XX CC Sequences AAZ06571-206607 are antisense polynucleotides targeted to a
XX CC nucleic acid molecule encoding human ELK-1 (also known as p62TCF). ELK-1
XX CC is a member of the ternary complex factor subfamily of Ets-domain
XX CC transcription factor proteins. The polynucleotides inhibit the expression
XX CC of human ELK-1, and this sequence targets the 5' untranslated region of
XX CC the ELK-1 RNA. Sequences AAZ06571-206607 all cause at least 30%
XX CC inhibition of ELK-1 expression. The antisense sequences can be used to
XX CC inhibit the expression of human ELK-1 in human cells or tissues in vitro.
XX CC ELK-1 uses a bipartite recognition mechanism mediated by both protein-DNA
XX CC and protein-protein interactions to regulate genes by direct and indirect
XX CC DNA binding and has been shown to control various signal transduction
XX CC pathways and other cell functions including apoptosis. This means that
XX CC antisense compounds inhibiting expression of ELK-1 can be used to treat
XX CC diseases associated with its expression in animals, particularly humans
XX CC and to prevent or delay infection, inflammation or tumour formation. The
XX CC compounds can also be used for diagnosis, as research reagents and in
XX CC kits
XX XX
XX SQ Sequence 18 BP; 0 A; 2 C; 12 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 14; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.1e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 232 GGTGGTGGTGGCGG 245
Db 1 GGTGGTGGTGGCGG 14
RESULT 899
ABA99961
ID ABA99961 standard; DNA; 18 BP.
XX AC ABA99961;
XX XX
XX DT 05-JUL-2002 (first entry)
XX DE Human ELK-1 PCR primer #2.
XX XX
XX KW Human; cytosine methylation; 5'-CpG-3'; uracil; cytosine; diagnosis;
XX KW drug; side effect; cancer; central nervous system; cardiovascular;
XX KW gastrointestinal; respiratory system; single nucleotide polymorphism;
XX KW SNP; cell differentiation; ELK-1; PCR; primer; ss.
XX XX
XX OS Homo sapiens.
```

```
XX PN WO200218632-A2.
XX PD 07-MAR-2002.
XX PF 01-SEP-2001; 2001WO-EP010074.
XX PR 01-SEP-2000; 2000DE-01043826.
XX PS 05-SEP-2000; 2000DE-01044543.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K, Guetig D;
XX DR WPI; 2002-371829/40.
XX PT Determining the degree of cytosine methylation in genomic DNA, useful for
XX PT diagnosis and prognosis, comprises selective hybridization of amplicons
XX PT from chemically treated DNA.
XX PS Example 1; Page 33; 56pp; German.
XX CC This invention describes a novel method for determining the degree of
XX CC methylation of a particular cytosine in a motif 5'-CpG-3', present in a
XX CC genomic sample of DNA. The sample is treated chemically to convert
XX CC cytosine (C) but not methylated C, to uracil, then part of the genomic
XX CC DNA that contains the target C is amplified to form a labeled amplicon.
XX CC The amplicon is hybridised to two classes, each with at least one member,
XX CC of oligonucleotides and/or peptide-nucleic acid (PNA) oligomers and the
XX CC degree of hybridisation to both classes is determined from the label on
XX CC the amplicon. From the ratio of labels hybridised to the two classes of
XX CC oligomers, the degree of methylation is calculated. The method is used:
XX CC (i) for diagnosis and/or prognosis of side effects of therapeutic drugs
XX CC and of a wide range of diseases, e.g. cancer, disorders of the central
XX CC nervous, cardiovascular, gastrointestinal and respiratory systems etc.,
XX CC particularly by detecting mutations or single nucleotide polymorphisms
XX CC (SNP's); and (ii) for differentiation of cell or tissue types and for
XX CC investigating cell differentiation. The method allows the methylation
XX CC status of many C residues to be determined simultaneously. This sequence
XX CC represents a PCR primer used in the amplification of the human ELK-1 gene
XX CC used in the method of the invention
XX SQ Sequence 18 BP; 1 A; 1 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.1e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 232 GGTGGTGGTGGCGG 245
DB 2 GGTGGTGGTGGCGG 15
|||||
RESULT 900
AAF88946
ID AAF88946 standard; DNA; 18 BP.
XX AC AAF88946;
XX DT 20-JAN-2003 (first entry)
XX DE Human ELK-1 PCR primer SEQ ID 2.
XX KW Human; cytosine methylation; methylation status; CpG; infection; cancer;
XX KW diagnosis; side-effect; cardiovascular disease; gastrointestinal disease;
XX KW inflammation; cell differentiation; ELK-1; PCR; Primer; ss.
XX OS Homo sapiens.
XX PN WO200272880-A2.
XX PD 19-SEP-2002.
XX PF 01-SEP-2001; 2001WO-EP014026.
XX PR 14-DEC-2001; 2001DE-01061625.
XX PS (EPIG-) EPIGENOMICS AG.
```

```
PF 08-MAR-2002; 2002WO-EP002572.
XX 09-MAR-2001; 2001DE-01012515.
XX 19-NOV-2001; 2001DE-01058283.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Berlin K;
XX DR WPI; 2002-723373/78.
XX PT Detecting methylation status of test DNA in a mixture, useful for
XX PT diagnosis and prognosis of disease, comprises bisulfite treatment then
XX PT selective amplification of test DNA.
XX PS Example 4; Page 43; 82pp; German.
XX CC This invention describes a novel method for detecting cytosine
XX CC methylation in DNA samples by: (i) chemically treating a genomic sample
XX CC to convert all non-methylated cytosines to uracil while leaving
XX CC methylated cytosines unchanged; (ii) amplification with 2 primer
XX CC oligonucleotides and a polymerase; and (iii) analysis of the amplicon and
XX CC deducing the methylation status of test DNA. The method is used for
XX CC determining the methylation status at different CpG positions, which is
XX CC used for diagnosis and/or prognosis of a very wide range of disorders,
XX CC e.g. side-effects of pharmaceuticals, cancer, cardiovascular or
XX CC gastrointestinal diseases, infections, inflammation, etc. The method is
XX CC also useful for differentiating between cell and tissue types and for
XX CC investigating cell differentiation. The method: (i) provides a
XX CC quantitative indication of the different methylated positions, and thus a
XX CC very accurate classification; and (ii) eliminates interference from
XX CC background DNA, making it suitable for analysis of serum or body fluids
XX CC (which contain background DNA in large excess). This sequence represents
XX CC a PCR primer used to amplify the human ELK-1 gene, described in the
XX CC disclosure of the invention
XX SQ Sequence 18 BP; 1 A; 1 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.1e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 232 GGTGGTGGTGGCGG 245
DB 2 GGTGGTGGTGGCGG 15
|||||
RESULT 901
ADC70281
ID ADC70281 standard; DNA; 18 BP.
XX AC ADC70281;
XX DT 18-DEC-2003 (first entry)
XX DE Primer oligo used for analysing CpG islands in genomic DNA (SeqID 771).
XX KW PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;
XX KW adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer;
XX KW cytosine methylation state.
XX OS Unidentified.
XX PN WO2003052135-A2.
XX PD 26-JUN-2003.
XX PF 10-DEC-2002; 2002WO-EP014026.
XX PR 14-DEC-2001; 2001DE-01061625.
XX PS (EPIG-) EPIGENOMICS AG.
```

PI Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;  
XX Nimrich I;  
DR WPI; 2003-533029/50.  
XX  
XX Detecting and differentiating cytosine methylation state of genomic DNA,  
PT useful for diagnosing, treating prognosticating and/or monitoring lung  
PT cell proliferative disorders e.g. adenocarcinoma and squamous cell  
PT carcinoma.  
XX  
XX Claim 15; SEQ ID NO 771; 58pp; English.  
XX  
XX This invention relates to a novel method for detecting and  
CC differentiating between lung cell proliferative disorders associated with  
CC at least one gene and/or their regulatory regions. Specifically, it  
CC refers to a method comprising contacting a target nucleic acid in a  
CC biological sample with at least one reagent, wherein the reagent is able  
CC to distinguish between methylated and non-methylated CpG dinucleotides  
CC present in the target DNA. As such, it is possible to further  
CC differentiate and diagnose medical conditions including adenocarcinoma  
CC and squamous cell carcinoma, and their respective adjacent lung tissue.  
CC The present invention describes cytosine oligomers and PNA-oligomers  
CC that are useful as probes for determining the cytosine methylation state  
CC of single nucleotide polymorphisms (SNPs) of the target sequence. This  
CC oligonucleotide sequence is a primer oligomer used for the analysis of  
CC CpG positions within genomic DNA, used in an exemplification of the  
CC invention.  
XX  
XX Sequence 18 BP; 3 A; 0 C; 10 G; 5 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 7.1e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1156 ATGTGGGGTGTGGG 1169  
Db 1 ATGTGGGGTGTGGG 14  
RESULT 902  
AAZ43839  
ID AAZ43839 standard; DNA; 19 BP.  
XX  
XX  
AC AAZ43839;  
XX  
XX 10-MAR-2000 (first entry)  
XX  
XX Human adult thymus cDNA clone vhl\_1 DNA probe.  
XX  
XX Human; secreted protein; treatment; nutritional activity; cytokine;  
KW cell proliferation; cell differentiation; hematopoiesis regulation;  
KW tissue growth; activin; inhibin; chemotactic; chemokinetic; hemostatic;  
KW thrombolytic; anti-inflammatory; invasion suppressor; tumor inhibition;  
KW gene therapy; ss.  
XX  
XX Synthetic.  
OS Homo sapiens.  
XX  
XX WO9955721-A1.  
XX  
XX 04-NOV-1999.  
XX  
XX 23-APR-1999; 99WO-US008504.  
XX  
XX 24-APR-1998; 98US-0082904P.  
XX 11-JUN-1998; 98US-0088994P.  
XX 12-JUN-1998; 98US-0089278P.  
XX 02-JUL-1998; 98US-0091647P.  
XX 24-AUG-1998; 98US-0097639P.  
XX 22-APR-1999; 99US-00097639.  
XX  
XX (ALPH-) ALPHAGENE INC.  
XX

PI Valenzuela D, Yuan O, Hoffman H, Hall J, Rapiejko P;  
XX WPI; 2000-052801/04.  
XX  
XX New polynucleotides encoding secreted human proteins, derived from human  
PT fetal brain, adult skin, adult brain, adult heart, adult thymus and adult  
PT aorta cDNA libraries.  
XX  
XX Disclosure; Page 270; 282pp; English.  
XX  
XX This invention describes novel human secreted proteins which are encoded  
CC by polynucleotides obtained from fetal brain, adult skin, adult brain,  
CC adult heart, adult thymus and adult aorta cDNA libraries. The  
CC polynucleotides and proteins are predicted to have biological activities  
CC which would make them suitable for treating, preventing or ameliorating  
CC medical conditions in humans and animals, although no supporting data is  
CC given. Suggested activities include nutritional activity, cytokine and  
CC cell proliferation/differentiation activity, immune stimulating (e.g. as  
CC vaccines) or suppressing activity, hematopoiesis regulating activity,  
CC tissue growth activity, activin/inhibin activity,  
CC chemotactic/chemokinetic activity, hemostatic and thrombolytic activity,  
CC receptor/ligand activity, anti-inflammatory activity, cadherin/tumor  
CC invasion suppressor activity, and tumor inhibition activity. The  
CC polynucleotides are also stated to be useful for gene therapy. AAZ43809-  
CC Z43840 represent DNA probes used to isolate the polynucleotides  
CC represented in AAZ43777-243808 which encode the secreted proteins  
CC represented in AAY50905-Y50947  
XX  
XX Sequence 19 BP; 6 A; 1 C; 10 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 7.5e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 34 AGGTAGGCAGGAGG 47  
Db 1 AGGTAGGCAGGAGG 14  
RESULT 903  
AAA82617  
ID AAA82617 standard; DNA; 19 BP.  
XX  
XX  
AC AAA82617;  
XX  
XX 04-DEC-2000 (first entry)  
XX  
XX cdk2 ribozyme binding site #54.  
XX  
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX Mammalia.  
OS  
XX WO2000032765-A2.  
XX  
XX 08-JUN-2000.  
XX  
XX 06-DEC-1999; 99WO-US028772.  
XX  
XX 04-DEC-1998; 98US-0110954P.  
XX  
XX (IMMU-) IMMUSOL INC.  
XX  
XX Tritz R, Welch PJ, Barber JR, Robbins JM;  
XX  
XX WPI; 2000-412314/35.  
XX  
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.  
XX  
XX Disclosure; Page 49; 109pp; English.  
XX  
XX

CC The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AA82415 to AA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX  
XX Sequence 19 BP; 2 A; 6 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 7.5e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 922 CTGTTCCAGCTGCT 935  
DB 6 CTGTTCCAGCTGCT 19

RESULT 904  
AAH57779  
ID AAH57779 standard; DNA; 19 BP.  
XX  
XX  
XX AC AAH57779;  
XX  
XX  
XX DT 10-SEP-2001 (first entry)  
XX  
XX DE Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:203.  
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
XX recognition site; target; ribozyme binding site; eye disease; vulnery;  
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
XX matrix metalloproteinase; growth factor; reductase; scarring; cycostatic;  
XX antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;  
XX antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
XX sickle cell retinopathy; ss.

XX Homo sapiens.  
OS Synthetic.  
XX  
XX WO200130362-A2.  
XX  
XX PD 03-MAY-2001.  
XX  
XX PF 26-OCT-2000; 2000WO-US029500.  
XX  
XX PR 26-OCT-1999; 99US-0161532P.  
XX (IMMU-) IMMUSOL INC.  
XX  
XX PA Robbins JM, Tritz R;  
XX WPI; 2001-300427/31.  
XX  
XX DR Treating proliferative skin or eye diseases and scarring, using ribozymes  
XX that cleave RNA encoding cytokines involved in inflammation, matrix  
XX metalloproteinases, growth factors and cell-cycle dependent kinases.  
XX  
XX PS Example 1; Page 86; 408pp; English.

XX The present invention describes a method for treating a proliferative  
XX skin or eye disease and scarring. The method involves administering a  
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in  
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
XX dependent kinase, growth factor or a reductase, or administering a  
XX nucleic acid molecule (II) comprising a promoter operably linked to a  
XX nucleic acid segment encoding (I). (I) can have antiproliferative,  
XX dermatological, cycostatic, antiseborrheic, antidiabetic, antisickling,  
XX ophthalmological, vulnery, keratolytic and virucide activities, and

CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic  
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention  
XX  
XX Sequence 19 BP; 2 A; 6 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 7.5e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 922 CTGTTCCAGCTGCT 935  
DB 6 CTGTTCCAGCTGCT 19

RESULT 905  
AAH80149/c  
ID AAH80149 standard; DNA; 20 BP.  
XX  
XX  
XX AC AAH80149;  
XX  
XX DT 17-AUG-1999 (first entry)  
XX  
XX DE Clostridium histolyticum collagenase PCR primer #1.  
XX Clostridium histolyticum; collagenase; enzymatically active; cleavage;  
XX fusion protein; PCR primer; ss.  
XX  
XX OS Synthetic.  
XX Clostridium histolyticum.  
XX JP11137256-A.  
XX  
XX PD 25-MAY-1999.  
XX  
XX PF 12-NOV-1997; 97JP-00310887.  
XX  
XX PR 12-NOV-1997; 97JP-00310887.  
XX (SEK ) SEIKAGAKU KOGYO CO LTD.  
XX  
XX PA WPI; 1999-374377/32.  
XX  
XX DR New enzymatically active polypeptide and kit containing it - useful for  
XX cleaving fusion proteins.

XX Example 1; Page 15; 16pp; Japanese.  
XX The present invention describes an enzymatically active polypeptide (I)  
XX derived from a Clostridium histolyticum collagenase with its collagen-  
XX combining region deleted which specifically recognizes a peptide with the  
XX sequence PLGP, and which cleaves the peptide by hydrolysing the peptide  
XX bond on C-terminal side of the leucine residue of this sequence and which  
XX does not decompose water-insoluble type I collagen. The present sequence  
XX represents a PCR primer used in an example from the present invention  
XX  
XX Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 7.9e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1527 TCAGCTACAAAGG 1540  
DB 17 TCAGCTACAAAGG 4

RESULT 906  
AAI99916/c  
ID AAI99916 standard; DNA; 20 BP.  
XX  
AC AAI99916;  
XX  
DT 18-FEB-2002 (first entry)  
XX  
DE Human alpha-2BAR genotyping PCR primer SEQ ID NO 22.  
XX  
KW Human; genotyping; alpha-2B; alpha-2A; alpha-2C; adrenergic receptor;  
KW polymorphic site; allelic variant; cardiovascular disease;  
KW central nervous system disease; adenylyl cyclase; MAP kinase activity;  
KW phosphorylation; inositol phosphate; alpha-2BAR; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN W0200179561-A2.  
XX  
PD 25-OCT-2001.  
XX  
PF 17-APR-2001; 2001WO-US012575.  
XX  
PR 17-APR-2000; 2000US-00551744.  
PR 10-AUG-2000; 2000US-00636259.  
PR 19-OCT-2000; 2000US-00692077.  
XX  
PA (LIGG/) LIGGETT S B.  
PA (SMAL/) SMALL K M.  
XX  
PI Liggett SB, Small KM;  
XX  
DR WPI; 2001-611728/70.  
XX  
XX Genotyping an alpha-2B, 2A, or 2C adrenergic receptor gene useful for  
PT determining whether an individual is at increased risk of developing a  
PT disease associated with the corresponding receptor comprises detecting a  
PT polymorphic site.  
XX  
PS Claim 10; Page 112; 163pp; English.  
XX  
CC The invention relates to genotyping an alpha-2B, 2A, or 2C adrenergic  
CC receptor gene (I)-(III) by detecting a polymorphic site, comprising: (a)  
CC obtaining a sample having a polynucleotide encoding an alpha-2B, alpha2A  
CC or alpha2C or fragment or complement of; and (b) detecting a polymorphic  
CC site comprising nucleotide positions 901-909 of (I), a site comprising  
CC cytosine or guanine at position 733 of (II) or a site comprising (A)  
CC (ggggcggggccg) or (B) (ggggcggctgg) at positions 961-972 of (III). The  
CC method may be used for genotyping an alpha2B, alpha2A or alpha2C receptor  
CC gene and further used to determine whether an individual is at increased  
CC risk of developing a disease associated with alpha2B, alpha2A or alpha2,  
CC comprising detecting a polymorphic site which correlate to disease  
CC selected from cardiovascular disease, central nervous system disease and  
CC combinations of these. In addition, the technique may be used to predict  
CC an individual's response to an alpha2B, alpha2A, or alpha2C agonist (e.g.  
CC epinephrine, norepinephrine, clonidine, oxymetazoline, guanabenz,  
CC UK14304, BHT933 and combinations of these) or antagonist (e.g. yohimbine,  
CC prazosin, ARC 239, rauwolfine, idazoxan, tolazoline, phentolamine and  
CC combinations of these) by detecting the polymorphic site and correlating  
CC the site to a predetermined response (where the response is correlated to  
CC adenylyl cyclase, MAP kinase activity, phosphorylation or inositol  
CC phosphate levels). The present sequence is that of a human alpha-2BAR PCR  
CC primer, useful for the genotyping methods of the invention  
XX  
SQ Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 7.9e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1252 ATCTTAGGACCCC 1265

|||||||

Db 17 ATCTTAGGACCCC 4  
RESULT 907  
AAC88715  
ID AAC88715 standard; DNA; 20 BP.  
XX  
AC AAC88715;  
XX  
DT 07-MAR-2001 (first entry)  
XX  
DE Human catenin-binding zinc finger protein PCR primer FVR463F.  
XX  
KW Catenin-binding zinc finger protein; cancer; neurological disorder;  
KW drug screening; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN EP1054059-A1.  
XX  
PD 22-NOV-2000.  
XX  
PF 17-MAY-1999; 99EP-00201543.  
XX  
PR 17-MAY-1999; 99EP-00201543.  
XX  
PA (VLA-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.  
XX  
PI Van Roy F, Vanlandschoot A, Janssens B;  
XX  
DR WPI; 2001-033776/05.  
XX  
XX Nucleic acid or its fragments, useful for diagnosing and treating cancer  
PT and neurological disorders, corresponds to a catenin-binding protein in  
PT signal transduction and gene regulatory pathways.  
XX  
PS Disclosure; Page 17; 71pp; English.  
XX  
CC The present invention is related to the coding sequence and protein  
CC fragments of a human catenin-binding zinc finger protein. The coding  
CC sequence was isolated from a human kidney cDNA library, but is expressed  
CC in most human tissue. The sequences provided by the invention can be used  
CC in the diagnosis and treatment of cancer and neurological disorders, and  
CC in drug screening to identify compounds capable of the same  
XX  
SQ Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;  
Query Match 0.8%; Score 14; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 7.9e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 877 GATGACTGTGGGAA 890

Db 2 GATGACTGTGGGAA 15

RESULT 908

AAC88704

ID AAC88704 standard; DNA; 20 BP.

XX AAC88704;

XX AAC88704;

DT 07-MAR-2001 (first entry)

XX Human catenin-binding zinc finger protein PCR primer FVR293F.

XX Catenin-binding zinc finger protein; cancer; neurological disorder;  
XX drug screening; PCR primer; ss.

XX Homo sapiens.

XX EP1054059-A1.

XX





Query Match 0.8%; Score 14; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 7.9e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 877 GATGACTGTGGAA 890  
| | | | | | | | | |  
DB 5 GATGACTGTGGAA 18

RESULT 911  
ABZ93277/c  
ID ABZ93277 standard; DNA; 20 BP.  
XX AC ABZ93277;  
XX DT 17-OCT-2003 (first entry)  
XX DE Human oligonucleotide sequence.  
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX OS Homo sapiens.  
XX PN WO200285308-A2.  
XX PD 31-OCT-2002.  
XX PF 23-APR-2002; 2002WO-US013135.  
XX PR 24-APR-2001; 2001US-0286137P.  
XX PA (EPIG-) EPIGENESIS PHARM INC.  
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shanabuddin S;  
XX DR WPI; 2003-229219/22.  
XX PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiqunone.  
XX FS Disclosure; SEQ ID NO 8519; 872pp; English.  
XX CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiqunone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiqunone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX SQ Sequence 20 BP; 6 A; 8 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 7.9e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1087 GTGCTGACACTGTG 1100  
| | | | | | | | | |  
DB 14 GTGCTGACACTGTG 1

RESULT 912  
ABZ22802/c  
ID ABZ22802 standard; DNA; 20 BP.  
XX AC ABZ22802;  
XX DT 02-APR-2003 (first entry)  
XX DE Human heparanase phosphorothioate oligonucleotide SEQ ID NO:3.  
XX KW Human; heparanase; phosphorothioate; antisense oligonucleotide;  
KW cytostatic; gene therapy; tumour; ss.  
XX OS Homo sapiens.  
XX OS Synthetic.  
XX FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate linkages"  
XX PN WO2003004705-A1.  
XX PD 16-JAN-2003.  
XX PF 01-JUL-2002; 2002WO-US020636.  
XX PR 05-JUL-2001; 2001US-00899440.  
XX PA (UYCO ) UNIV COLUMBIA NEW YORK.  
XX PI Stein C;  
XX DR WPI; 2003-201558/19.  
XX PT New oligonucleotide having a sequence complementary to a sequence of  
PT ribonucleic acid encoding a heparanase, useful for preparing a  
PT composition for treating tumor.  
XX FS Claim 7; Page 32; 48pp; English.  
XX CC The present invention describes an oligonucleotide having a sequence  
CC complementary to a sequence of ribonucleic acid encoding a heparanase.  
CC The oligonucleotide hybridises with the ribonucleic acid under conditions  
CC of high stringency and has a sequence comprising 10-40 bp. The  
CC internucleoside linkages of the oligonucleotide comprise at least one  
CC phosphorothioate linkage. Hybridisation of the oligonucleotide to the  
CC ribonucleic acid inhibits expression of the heparanase, where inhibition  
CC of heparanase means at least a 50% reduction in the quality of  
CC heparanase. Also described: (1) a method of inhibiting expression of a  
CC heparanase in a cell; (2) a composition comprising the above  
CC oligonucleotide in an amount effective to inhibit the expression of  
CC heparanase in the cell and a carrier; and (3) a method of treating a  
CC tumour in a subject comprises administering to the subject an amount of  
CC the above oligonucleotide effective to inhibit expression of a heparanase  
CC in the subject. Heparanase antisense oligonucleotides have cytostatic  
CC activity, can be used in gene therapy, and can be used for preparing a  
CC composition for treating tumours. The present sequence represents a human  
CC heparanase phosphorothioate antisense oligonucleotide, which is used in  
CC the exemplification of the present invention  
XX SQ Sequence 20 BP; 6 A; 8 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 7.9e+02;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 273 TGTCTGCTCTCTGGG 286  
 DB 14 TGTCTGCTCTCTGGG 1

RESULT 913  
 ACC86848/c  
 ID ACC86848 standard; DNA; 20 BP.  
 XX  
 AC ACC86848;  
 XX  
 DT 04-AUG-2003 (first entry)  
 XX  
 DE Mouse VEGFR-1 chimeric phosphorothioate oligonucleotide SEQ ID NO:143.  
 XX  
 KW Vascular endothelial growth factor receptor 1; VEGF receptor; VEGFR;  
 KW inhibitor; cytostatic; antirheumatic; antiarthritic; antiangiogenic;  
 KW antiinflammatory; antisense gene therapy; hyperproliferative disorder;  
 KW cancer; rheumatoid arthritis; angiogenesis; infection; inflammation;  
 KW tumour formation; phosphorothioate; 2'-O-methoxyethyl; 2'-MOE; ss.  
 XX  
 OS Mus musculus.  
 OS Synthetic.  
 XX  
 PH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "This oligonucleotide has a phosphorothioate  
 FT backbone and 2'-O-methoxyethyl (2'-MOE) wings at the 5'  
 FT and 3' ends, which are 5 nucleotides in length. Also all  
 FT cytidine residues are 5-methylcytidines"  
 XX  
 PN WO2003022227-A2.  
 XX  
 XX 20-MAR-2003.  
 XX  
 XX 12-SEP-2002; 2002WO-US029148.  
 XX  
 XX 13-SEP-2001; 2001US-00953318.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Bennett CF, Watt AT;  
 XX  
 XX WPI; 2003-301004/29.  
 XX  
 XX New antisense oligonucleotide targeted to a nucleic acid encoding  
 XX vascular endothelial growth factor receptor-1, useful for diagnosing or  
 XX treating cancer, rheumatoid arthritis, or diseases or conditions  
 XX involving angiogenesis.  
 XX  
 XX Claim 3; Page 86; 150pp; English.

The present invention describes a compound (C) 8-50 nucleobases in length  
 targeted to a nucleic acid molecule encoding vascular endothelial growth  
 factor receptor-1 (VEGFR-1), where the compound inhibits the expression  
 of VEGFR-1 and specifically hybridises with the nucleic acid encoding  
 VEGFR-1 or with an 8-nucleobase portion of an active site on the nucleic  
 acid molecule encoding VEGFR-1. Also described: (1) a composition  
 comprising (C) and a carrier or diluent; (2) inhibiting the expression of  
 VEGFR-1 in cells or tissues by contacting the cells or tissues with (C)  
 so that the expression of VEGFR-1 is inhibited; and (3) treating an  
 animal having a disease or condition associated with VEGFR-1 by  
 administering (C) to the animal so that the expression of VEGFR-1 is  
 inhibited. (C) has antiangiogenic, antirheumatic, antiarthritic,  
 cytostatic and antiinflammatory activities, and can be used in antisense  
 gene therapy. The antisense compounds are useful for modulating the

CC expression of VEGFR-1 and for treating diseases or conditions associated  
 CC with the expression of VEGFR-1, such as hyperproliferative disorders  
 CC (e.g. cancer), rheumatoid arthritis, or diseases or conditions involving  
 CC angiogenesis. The antisense compounds are also useful for diagnostics,  
 CC therapeutics, prophylaxis, e.g. to prevent or delay infection,  
 CC inflammation or tumour formation, as research reagents and kits, and in  
 CC distinguishing between functions of various members of a biological  
 CC pathway. The present sequence represents a mouse VEGFR-2 chimeric  
 CC phosphorothioate antisense oligonucleotide, which is used in an example  
 CC from the present invention  
 XX  
 XX Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 14; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 7.9e+02;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 539 CCATCTTTGACAAAG 552  
 DB 18 CCATCTTTGACAAAG 5

RESULT 914  
 AAX09162  
 ID AAX09162 standard; DNA; 21 BP.  
 XX  
 AC AAX09162;  
 XX  
 DT 24-MAR-1999 (first entry)  
 XX  
 DE Human biallelic polymorphic marker upstream primer #42.  
 XX  
 KW Polymorphism; biallelic; human; forensic; paternity testing; disease;  
 KW detection; phenotypic typing; characteristic; infection; hereditary;  
 KW autoimmune disease; cancer; inflammation; drug; therapy; medicament;  
 KW treatment; marker; primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 XX WO9820165-A2.  
 XX  
 XX 14-MAY-1998.  
 XX  
 XX 05-NOV-1997; 97WO-US020313.  
 XX  
 XX 06-NOV-1996; 96US-0030455P.  
 XX  
 XX (WHEED ) WHITEHEAD INST BIOMEDICAL RES.  
 XX  
 XX Lander ES, Wang D, Hudson T;  
 XX  
 XX WPI; 1998-286974/25.  
 XX  
 XX New isolated nucleic acid segments from the human genome - used for  
 XX determining polymorphic forms for use in e.g. forensics, paternity  
 XX testing or phenotypic typing for disease.  
 XX  
 XX Claim 15; Page 51; 310pp; English.

AAX09121-X10268 are allele-specific oligonucleotide primers used in the  
 isolation of various biallelic polymorphic markers found in the human  
 genome (represented in AAX10269-X12937). These primers can be used in a  
 method for determining polymorphic forms in an individual for use in e.g.  
 forensics, paternity testing or for phenotypic typing for diseases such  
 as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular  
 dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial  
 hypercholesterolemia, polycystic kidney disease, hereditary  
 spherocytosis, von Willebrand's disease, tuberculous scleriosis, hereditary  
 haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos  
 syndrome, osteogenesis imperfecta, acute intermittent porphyria,  
 CC autoimmune diseases, inflammation, cancer, diseases of the nervous  
 CC system, infection by pathogenic microorganisms, and characteristics such

as longevity, appearance (e.g. baldness, obesity), strength, speed, endurance, fertility, and susceptibility or receptivity to particular drugs or therapeutic treatments. The isolated polymorphic nucleic acid segments can also be used to produce medicaments for the treatment or prophylaxis of such diseases

Sequence 21 BP; 7 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 8.3e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 714 ACTGGAACATGAAG 727  
|||||

Db 4 ACTGGAACATGAAG 17  
|||||

RESULT 915  
AAV08201  
ID AAV08201 standard; DNA; 21 BP.  
AC AAV08201;  
XX  
XX 27-JAN-1999 (first entry)  
XX  
XX PCR primer ABCR.EXON7:F for ABCR coding sequence.  
DE  
XX ATP binding cassette; ABC transporter; ABCR; Stargardt Disease; therapy;  
XX Fundus Flavimaculatus; age-related macular degeneration; diagnosis;  
KW PCR primer; ss.  
XX  
XX Synthetic.  
OS Homo sapiens.  
XX WO9837764-A1.  
PN  
XX 03-SEP-1998.  
PD  
XX 27-FEB-1998; 98WO-US003895.  
PF  
XX 27-FEB-1997; 97US-0039388P.  
FR  
XX (BAYU) BAYLOR COLLEGE MEDICINE.  
PA (UYJO) UNIV JOHNS HOPKINS.  
PA (USSH) US DEPT HEALTH & HUMAN SERVICES.  
PA (UTAH) UNIV UTAH.  
XX  
XX Allikmets R, Anderson KL, Dean M, Leppart M, Lewis RA, Li Y;  
PI Lupekki JR, Nathans J, Rattner A, Shroyer NF, Singh N, Smallwood PM;  
PI Sun H;  
XX WPI; 1998-495375/42.  
DR  
XX Retina-specific ATP-binding cassette transporter and DNA - useful for,  
PT e.g. diagnosis and treatment of macular degeneration, such as in  
PT Stargardt Disease, Fundus Flavimaculatus and age-related degeneration.  
XX  
XX Claim 41; Page 27; 79pp; English.  
PS  
XX This sequence represents a PCR primer for DNA encoding the human retina  
CC specific ATP binding cassette transporter (ABCR) of the invention. ABCR  
CC may be used in compositions for screening agents that alters ABCR. The  
CC agent can inhibit Stargardt Disease, Fundus Flavimaculatus and age-  
CC related macular degeneration (MD). Primers (such as this sequence) and  
CC probes for the ABCR DNA can be used in a diagnostic kit for detecting MD  
XX  
XX Sequence 21 BP; 8 A; 3 C; 6 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 8.3e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 704 AGGAGATCAGACTG 717

|||||

Db 8 AGGAGATCAGACTG 21  
|||||

RESULT 916  
AA335653/C  
ID AA335653 standard; DNA; 21 BP.  
XX  
XX AA335653;  
AC  
XX 09-JUL-1999 (first entry)  
DT  
XX  
XX PCR primer used to amplify human heparanase cDNA.  
DE  
XX Heparanase; hpa; modulator; heparin-binding growth factor;  
KW cellular response; cytokine; cell interaction; plasma lipoprotein;  
KW cellular susceptibility; infection; disintegration;  
KW neurodegenerative plaque; wound healing; angiogenesis; restenosis;  
KW atherosclerosis; inflammation; neurodegenerative disease; neutralise;  
KW plasma heparin; micrometastasis; autolimmune lesion; renal failure;  
KW PCR primer; ss.  
XX  
XX Synthetic.  
OS  
XX WO9511798-A1.  
PN  
XX 11-MAR-1999.  
PD  
XX 31-AUG-1998; 98WO-US017954.  
PF  
XX 02-SEP-1997; 97US-00922170.  
PR  
XX 02-JUL-1998; 98US-00109386.  
PR  
XX (INSI-) INSIGHT STRATEGY & MARKETING LTD.  
PA (HADA-) HADASIT MEDICAL RES SERVICES & DEV.  
PA (FRIE/) FRIEDMAN M M.  
XX  
XX Pecker I, Vlodaysky I, Feinstein E;  
PI  
XX WPI; 1999-302255/25.  
DR  
XX New human polynucleotide useful for treating angiogenesis, restenosis,  
PT and inflammation.  
PT  
XX Example 7; Page 30; 63pp; English.  
PS  
XX The specification describes a polypeptide having heparanase (hpa)  
CC activity. The recombinant protein is used as a modulator of heparin-  
CC binding growth factors, cellular responses to heparin-binding growth  
CC factors and cytokines, cell interaction with plasma lipoproteins,  
CC cellular susceptibility to viral, protozoal and bacterial infections or  
CC disintegration of neurodegenerative plaques. Heparanase may be useful for  
CC conditions such as wound healing, angiogenesis, restenosis,  
CC atherosclerosis, inflammation, neurodegenerative diseases, and viral  
CC infections. Mammalian heparanase can be used to neutralize plasma  
CC heparin, and anti-heparanase antibodies may be applied for  
CC immunodetection and diagnosis of micrometastases, autoimmune lesions, and  
CC renal failure in biopsy specimens, plasma samples, and body fluids. The  
CC present PCR primer was used to amplify hpa cDNA, in the course of the  
CC invention  
XX  
XX Sequence 21 BP; 6 A; 8 C; 6 G; 1 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 8.3e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 273 TGCTGCTCTGGGG 286  
|||||

Db 14 TGCTGCTCTGGGG 1  
|||||

RESULT 917

```

AAA75055/c
ID AAA75055 standard; DNA; 21 BP.
XX
AC AAA75055;
XX
XX 15-JAN-2001 (first entry)
XX
XX PCR primer hpl-629 used to amplify human cDNA encoding heparanase.
XX
XX Human; heparanase; gene therapy; tumour; inflammation; autoimmunity;
XX heparin-binding growth factor; cytokine; neurodegenerative plaque;
XX wound healing; infection; burn; angiogenesis; restenosis;
XX atherosclerosis; inflammation; neurodegenerative disease;
XX Gerstmann-Straussler Syndrome; Creutzfeldt-Jakob disease; PCR primer; ss.
XX
OS Homo sapiens.
XX
XX WO200052178-A1.
XX
XX 08-SEP-2000.
XX
XX 14-FEB-2000; 2000WO-US003542.
XX
XX 01-MAR-1999; 99US-00258892.
XX
XX (INSI-) INSIGHT STRATEGY & MARKETING LTD.
XX (HADA-) HADASIT MEDICAL RES SERVICES & DEV.
XX (FRIE/) FRIEDMAN M M.
XX
XX Pecker I, Vlodavsky I, Feinstein E;
XX
XX WPI; 2000-579289/54.
XX
XX New polynucleotides encoding a polypeptide having heparanase activity,
XX useful in wound healing and in gene therapy, particularly in treating
XX tumor, inflammation, autoimmunity, neurodegenerative diseases.
XX
XX Example 6; Page 53; 152pp; English.
XX
XX The present PCR primer was used to amplify a human cDNA sequence, which
XX encoded a protein with heparanase catalytic activity. The heparanase
XX (hpa) polynucleotide is useful in gene therapy, particularly in treating
XX tumour, inflammation or autoimmunity. Particularly, the polynucleotide is
XX useful in modulating the bioavailability of heparin-binding growth
XX factors, cellular responses to heparin-binding growth factors (e.g. bFGF)
XX and cytokines (e.g. interleukin (IL)-8), cell interaction with plasma
XX lipoproteins, cellular susceptibility to certain viral and some bacterial
XX and protozoa infections, or disintegration of neurodegenerative plaques.
XX The polynucleotide is also useful in wound healing (e.g. thermal,
XX chemical or radiation burns), and in the treatment of angiogenesis,
XX restenosis, atherosclerosis, inflammation, neurodegenerative diseases
XX (Gerstmann-Straussler Syndrome or Creutzfeldt-Jakob disease), and some
XX viral, bacterial or protozoa infections
XX
XX Sequence 21 BP; 6 A; 8 C; 6 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 8.3e-02;
XX Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 273 TGCCTCCTCTGGGG 286
DB 14 TGCCTCCTCTGGGG 1
XX
XX RESULT 918
XX AAH28645
XX ID AAH28645 standard; DNA; 21 BP.
XX
XX AC AAH28645;
XX
XX 17-JUL-2001 (first entry)
XX
XX

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```

DE Human interleukin-13 coding sequence fragment PCR primer #20.
XX
XX Human; interleukin-13; IL13; single nucleotide polymorphism; SNP; cancer;
XX inflammation; immune disorder; cytokine; asthma; chromosome 5q31;
XX fibrosis; forensic; disease susceptibility; drug screening; PCR primer;
XX ss.
XX
XX Homo sapiens.
XX
XX WO200123410-A2.
XX
XX 05-APR-2001.
XX
XX 27-SEP-2000; 2000WO-US026556.
XX
XX 28-SEP-1999; 99US-0156489P.
XX
XX (GENA-) GENAISSANCE PHARM INC.
XX
XX Chew A, Denton RR, Nandabalan K, Stephens JC;
XX
XX WPI; 2001-343160/36.
XX
XX Novel polynucleotide comprising single nucleotide polymorphisms in human
XX interleukin-13 gene is useful for studying expression and function of
XX interleukin-13, as well as diagnosing and treating cancer, inflammatory,
XX and immune disorders.
XX
XX Example 1; Page 32; 85pp; English.
XX
XX The present invention provides the protein, cDNA and genomic sequences of
XX human interleukin-13 (IL13), and describes the single nucleotide
XX polymorphisms (SNPs) found within the gene, which is found on chromosome
XX 5q31. IL13 is a pro-inflammatory cytokine thought to be involved in the
XX pathogenesis of asthma and other immune and inflammatory diseases. The
XX IL13 sequences and the SNPs identified can be used in drug screening, to
XX determine an individual's susceptibility to disease, in forensic and
XX paternity testing, and to identify treatments for cancer, immune and
XX inflammatory diseases, including asthma and diseases characterised by
XX fibrosis. The present sequence is an IL13 fragment PCR primer
XX
XX Sequence 21 BP; 5 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 14; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 8.3e-02;
XX Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 843 TGGGTACCTGGACA 856
DB 5 TGGGTACCTGGACA 18
XX
XX RESULT 919
XX ABL53717
XX ID ABL53717 standard; DNA; 21 BP.
XX
XX AC ABL53717;
XX
XX 24-JUN-2002 (first entry)
XX
XX PGK1 PCR primer oVT201.
XX
XX Gene identification; cell proliferation; cancer; arteriosclerosis;
XX psoriasis; rheumatoid arthritis; restenosis; gene therapy; cytostatic;
XX antiarteriosclerotic; antipsoriatic; antiarthritic; antineumatic;
XX vasotropic; diagnosis; perturbation; PGK1; PCR; primer; ss.
XX
XX Saccharomyces cerevisiae.
XX
XX US2002019005-A1.
XX
XX 14-FEB-2002.
XX

```

PF 02-AUG-2001; 2001US-00921101.  
XX  
PR 18-FEB-1999; 99US-00252204.  
XX  
PA (ARCA-) ARCARIS INC.  
XX  
XX Kamb CA;  
PI  
XX WPI; 2002-328583/36.  
XX  
DR Identifying cell proliferation genes for treating diseases related to  
XX unregulated proliferation, by selecting revertant cell lines, analyzing  
PT their gene expression pattern and identifying differentially expressed  
PT genes.  
PT  
XX Example 4; Page 30; 42pp; English.  
PS  
XX The present invention relates to selection systems for the identification  
XX of cell proliferation genes based on functional analysis. A process is  
CC provided for the identification of a cell proliferation promoting  
CC activity, the isolation of genes involved in such activity, and the use  
CC of these genes for the diagnosis or treatment of a disease associated  
CC with excessive cell proliferation. The cell proliferation gene may be an  
CC oncogene, a dominant transforming gene, a tumour suppressor gene or a  
CC gene involved in the control of apoptosis. Antibodies, peptides and  
CC nucleic acids can be designed to specifically interfere with the function  
CC of the identified gene and/or its gene product for the treatment of  
CC cancer, arteriosclerosis, psoriasis, rheumatoid arthritis and restenosis  
CC (all claimed). In an embodiment of the invention, growth-proficient  
CC revertants are induced using mutagenic agents termed perturbagens.  
CC Revertant cells are selected, and the gene(s) that allow escape from  
CC arrest are identified. The present sequence is that of PCR primer oV7201,  
CC which is homologous to a region within the PGK1 3' untranslated region.  
CC The primer was used in an example from the invention in which the  
CC pheromone response pathway of *Saccharomyces cerevisiae* was used to  
CC determine the general efficacy of a screen for perturbagen molecules  
XX  
XX Sequence 21 BP; 6 A; 1 C; 8 G; 6 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 8.3e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 8 AGCGTAAAGGATGG 21  
Db 6 AGCGTAAAGGATGG 19  
|||||  
RESULT 920  
ABS57693  
ID ABS57693 standard; DNA; 21 BP.  
XX  
AC ABS57693;  
XX  
DT 27-FEB-2003 (first entry)  
XX  
DE *S. cerevisiae* PGK1 PCR primer oV7201.  
XX Cell proliferation; cellular target; viral growth; perturbagen; PCR;  
XX primer; ss.  
XX  
OS *Saccharomyces cerevisiae*.  
XX  
XX US2002132229-A1.  
PN  
XX 19-SEP-2002.  
PD  
XX 14-AUG-2001; 2001US-00929663.  
PF  
XX 19-AUG-1996; 96US-00699266.  
PR  
XX 04-MAR-1997; 97US-00812994.  
PR  
XX 19-AUG-1997; 97WO-US014514.  
PR  
XX 06-NOV-1997; 97US-009565477.  
PR

PR 26-FEB-1999; 99US-00259155.  
XX  
XX (ARCA-) ARCARIS INC.  
XX  
XX Kamb CA, Poritz MA;  
PI  
XX WPI; 2003-138536/13.  
XX  
XX Identifying cell proliferation gene involved in viral growth, comprises  
PT identifying cell that continues to proliferate within virally infected  
PT cells, and identifying corresponding cell proliferation gene in  
PT identified cell.  
XX  
XX Example 4; Page 30; 43pp; English.  
PS  
XX This invention describes a novel method for identifying a cell  
XX proliferation gene or a cellular target involved in viral growth within a  
CC cell. The method comprises: (a) identifying within a number of virally  
CC infected cells a cell that continues to proliferate; and (b) identifying  
CC within the cell that continues to proliferate a corresponding cell  
CC proliferation gene or cellular target. The invention also describes a  
CC method for identifying a perturbagen that inhibits viral growth. The cell  
CC proliferation gene identified by the above mentioned method is useful for  
CC the diagnosis or treatment of a disease associated with aberrant or  
CC unregulated cell proliferation, or for the development of antisense  
CC approaches and ribozymes. As the method involves positive selection,  
CC i.e., selection for growth, rather than cessation of growth, it is easier  
CC to identify and separate growing cells from growth arrested cells than to  
CC isolate non-transformed revertants. Since cultured tumour cell lines grow  
CC vigorously in culture, the method can be performed in a time-efficient  
CC manner, as growing colonies can be identified, isolated, and analysed  
CC very quickly. Redundancy in growth control pathways is not a problem in  
CC the growth suppressed tumour cell lines provided and used with the method  
CC of the invention, as is the case in assays based on selection for non-  
CC transformed cells. This sequence represents a PCR primer used with the  
CC primer represented in ABS57694 which is capable of amplifying the yeast  
CC [*Saccharomyces cerevisiae*] PGK1 3'UTR which is used in a construct to  
CC identify perturbagens as described in the method of the invention  
XX  
XX Sequence 21 BP; 6 A; 1 C; 8 G; 6 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 14; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 8.3e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 8 AGCGTAAAGGATGG 21  
Db 6 AGCGTAAAGGATGG 19  
|||||  
RESULT 921  
ADD14266  
ID ADD14266 standard; DNA; 21 BP.  
XX  
AC ADD14266;  
XX  
DT 01-JAN-2004 (first entry)  
XX  
DE Human src biomarker forward PCR primer SEQ ID NO:455.  
XX  
XX predictor set; protein tyrosine kinase activity modulator;  
XX protein tyrosine kinase pathway; protein tyrosine kinase; cytostatic;  
XX gene therapy; drug sensitivity; genetic profile; cancer; human;  
XX PCR primer; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
XX WO2003062395-A2.  
PN  
XX 31-JUL-2003.  
PD  
XX 17-JAN-2003; 2003WO-US001981.  
PF

XX 18-JAN-2002; 2002US-0350061P.  
PR (BRIM ) BRISTOL-MYERS SQUIBB CO.  
XX Huang F, Fairchild CR, Lee FY, Shaw P;  
XX WPI; 2003-636735/60.  
XX  
XX New polynucleotides and polypeptides for predicting the activity of  
PT compounds that interact with protein tyrosine kinases and/or protein  
PT tyrosine kinase pathways.  
XX  
XX Example 2; SEQ ID NO 455; 139bp; English.  
XX  
XX The present invention describes a predictor set comprising a plurality of  
CC polynucleotides or polypeptides whose expression pattern is predictive of  
CC the response of cells to treatment with a compound that modulates protein  
CC tyrosine kinase activity or members of the protein tyrosine kinase  
CC pathway. Also described: (1) predicting whether a compound is capable of  
CC modulating the activity of cells, comprising obtaining a sample of cells,  
CC determining whether the cells express a plurality of markers, and  
CC correlating the expression of the markers to the compound's ability to  
CC modulate the activity of the cells; (2) a plurality of cell lines for  
CC identifying polynucleotides and polypeptides whose expression levels  
CC correlate with compound sensitivity or resistance of cells associated  
CC with a disease state; and (3) identifying polynucleotides and  
CC polypeptides that predict compound sensitivity or resistance of cells  
CC associated with a disease state, comprising subjecting the plurality of  
CC cell lines to one or more compounds, analysing the expression pattern of  
CC a microarray of polynucleotides or polypeptides, and selecting  
CC polynucleotides or polypeptides that predict the sensitivity or  
CC resistance of cells associated with a disease state by using the  
CC expression pattern of the microarray. The polynucleotides and  
CC polypeptides have cytostatic activities, and can be used in gene therapy.  
CC The polynucleotides and polypeptides are useful in predicting the  
CC activity of compounds that interact with protein tyrosine kinases and/or  
CC protein tyrosine kinase pathways. These may be used in determining drug  
CC sensitivity in patients to allow the development of individualized  
CC genetic profiles which aid in treating diseases and disorders (e.g.  
CC cancer) based on patient response at a molecular level. The present  
CC sequence is used in the exemplification of the present invention.  
XX  
XX Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;  
XX  
Query Match 0.8%; Score 14; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 8.3e+02; Indels 0; Gaps 0;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 245 GCAGTGACCCCTGGA 258  
Db |||||  
7 GCAGTGACCCCTGGA 20  
RESULT 922  
AAT53444  
ID AAT53444 standard; RNA; 17 BP.  
XX  
XX AAT53444;  
AC  
XX  
XX 25-MAR-2003 (revised)  
DT 27-MAR-1997 (first entry)  
XX  
XX Rat ICAM hammerhead ribozyme target sequence (nt. position 510).  
XX  
XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;  
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;  
KW intercellular adhesion molecule; rel A; tumour necrosis factor;  
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;  
KW translocation; chronic myelogenous leukaemia; CML; cancer;  
KW Philadelphia chromosome; inflammation; autoimmune disease;  
KW atherosclerosis; myocardial infarction; stroke; restenosis;  
KW transplant rejection; rheumatoid arthritis; psoriasis;

KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;  
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;  
KW ss.  
XX  
XX Rattus rattus.  
XX  
XX WO9523225-A2.  
XX  
XX 31-AUG-1995.  
XX  
XX 23-FEB-1995; 95WO-IB000156.  
XX  
XX 23-FEB-1994; 94US-00201109.  
XX 29-MAR-1994; 94US-00218934.  
XX 04-APR-1994; 94US-00222795.  
XX 07-APR-1994; 94US-00224483.  
XX 15-APR-1994; 94US-00227958.  
XX 18-APR-1994; 94US-00228041.  
XX 18-MAY-1994; 94US-00245736.  
XX 06-JUL-1994; 94US-00271280.  
XX 15-AUG-1994; 94US-00291932.  
XX 16-AUG-1994; 94US-00291433.  
XX 17-AUG-1994; 94US-00292620.  
XX 19-AUG-1994; 94US-00293520.  
XX 02-SEP-1994; 94US-00300000.  
XX 08-SEP-1994; 94US-00303039.  
XX 23-SEP-1994; 94US-00311486.  
XX 23-SEP-1994; 94US-00311749.  
XX 28-SEP-1994; 94US-00314397.  
XX 03-OCT-1994; 94US-00316771.  
XX 07-OCT-1994; 94US-00319492.  
XX 11-OCT-1994; 94US-00321993.  
XX 04-NOV-1994; 94US-00334847.  
XX 10-NOV-1994; 94US-00337608.  
XX 28-NOV-1994; 94US-00345516.  
XX 16-DEC-1994; 94US-00357577.  
XX 23-DEC-1994; 94US-00363233.  
XX 30-JAN-1995; 95US-00380734.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Stinchcomb DT, Chowira B, Direnzo A, Draper KG, Dudycz LW;  
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcawiggen JA;  
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;  
PI Tracz D, Usman N, Wincott FE, Woolf T;  
XX  
XX WPI; 1995-351090/45.  
XX  
XX Ribozymes having modified bases and methods for producing them - for use  
PT in inhibiting disease related genes.  
XX  
XX Claim 2; Page 201; 407pp; English.  
XX  
XX The present sequence represents a preferred target sequence for an  
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the  
CC nucleotide base position indicated in the DE line. Regions of the mRNA  
CC that do not form secondary folding structures and that contain potential  
CC hammerhead and hairpin ribozyme cleavage sites were identified by  
CC computer analysis. Ribozymes directed against these mRNA sequences were  
CC designed and synthesised with modifications that improve their nuclease  
CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby  
CC inhibit ICAM-1 expression, making them useful for reducing transplant  
CC rejection and alleviating symptoms in patients with rheumatoid arthritis,  
CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to  
CC correct PI field.)  
XX  
XX Sequence 17 BP; 2 A; 4 C; 7 G; 0 T; 4 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 70.6%; Pred. No. 7.3e+02;  
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;  
QY 272 GTGCTGCTCTGGGAA 288



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PN EP747386-A2.
XX 11-DEC-1996.
XX
XX PF 07-JUN-1996; 96EP-00304315.
XX
XX PR 07-JUN-1995; 95US-00484666.
XX
XX PR 07-JUN-1995; 95US-00486408.
XX
XX (GENE-) GEN-PROBE INC.
XX
XX PA Brown SJ, Dattagupta N, Naidu YM;
XX
XX WPI; 1997-023093/03.
XX
XX Oligo(nucleotide(s) complementary to interleukin-6 receptor mRNA - for
XX treating proliferative diseases, e.g. cancer, auto-immune diseases or
XX viral infections.
XX
XX Claim 1; Page 16; 18pp; English.
XX
XX AAT50887-T50904 represent oligonucleotides of the invention. These
XX sequences are all probes for interleukin-6 receptor (IL-6R) mRNA. IL-6 is
XX one of the most well characterised of the cytokines. It functions through
XX interacting with at least two transmembrane glycoprotein receptor
XX molecules on the surface of target cells. The receptors are the IL-6R,
XX and the signal transducer gp130. Signal transduction by IL-6 involves the
XX concerted action of both IL-6R and gp130. IL-6 overproduction is
XX implicated in many different disease states, particularly in cellular
XX proliferation associated with these diseases. These sequences bind to the
XX IL-6R coding sequence, thereby inhibiting IL-6R production. The sequences
XX therefore inhibit the functioning of IL-6. These sequences can be used
XX for inhibiting disease-associated cellular proliferation. The
XX oligonucleotides are especially useful for treating cancer (e.g. renal
XX cell carcinoma), autoimmune diseases or viral infections. They can also
XX be used as probes for detecting IL-6 receptor mRNA, especially for
XX evaluating the effectiveness of drugs in reducing IL-6 receptor mRNA
XX levels
XX
XX SQ Sequence 17 BP; 2 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 7.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1596 GGTGGACACCGAGTCT 1612
DB 1 GGTGGACACCGTCTCT 17

RESULT 926
AAX71472
ID AAX71472 standard; RNA; 17 BP.
AC AAX71472;
XX
XX DT 28-JUN-1999 (first entry)
XX
XX DE Human KDR VEGF receptor hammerhead ribozyme substrate #484.
XX
XX KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
XX KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
XX tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
XX fms-like tyrosine kinase 1; Kinase insert domain containing receptor;
XX foetal liver kinase 1; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO9715662-A2.
XX
XX PD 01-MAY-1997.
XX
XX PF 25-OCT-1996; 96WO-US017480.

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XX 26-OCT-1995; 95US-0005974P.
XX
XX PR 11-JAN-1996; 96US-00584040.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX PA (CHIR ) CHIRON CORP.
XX
XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX
XX WPI; 1997-259017/23.
XX
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
XX stability - useful for treating e.g. tumour angiogenesis, psoriasis,
XX rheumatoid arthritis, etc., in a human patient.
XX
XX Claim 4; Page 111; 218pp; English.
XX
XX The present invention describes nucleic acid molecules which modulate the
XX synthesis, expression and/or stability of a mRNA encoding 1 or more
XX receptors of vascular endothelial growth factor (VEGF). A patient of
XX (preferably human) having a condition associated with the level of the
XX fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
XX receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
XX angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
XX treated by administering the nucleic acid molecule or the expression
XX vector to the patient. AAX67275 to AAX75752 represent specific examples
XX of nucleic acid molecules from the present invention
XX
XX SQ Sequence 17 BP; 0 A; 5 C; 7 G; 0 T; 5 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. No. 7.3e+02;
Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 1035 CTTTGCCCTGGCCGAG 1051
DB 1 CUUUGCUUGGCCCGG 17

RESULT 927
AAA23256/c
ID AAA23256 standard; RNA; 17 BP.
XX
XX AC AAA23256;
XX
XX DT 19-JUN-2000 (first entry)
XX
XX DE Integrin subunit beta 3 substrate sequence SEQ ID NO:6482.
XX
XX KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
XX integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
XX ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
XX dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
XX age related macular degeneration; inflammation; neovascular glaucoma;
XX myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
XX tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;
XX Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO9950403-A2.
XX
XX PD 07-OCT-1999.
XX
XX PF 24-MAR-1999; 99WO-US006507.
XX
XX PR 27-MAR-1998; 98US-0079678P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX

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DR WPI; 1999-591315/50.  
XX Novel ribozymes for modulating the synthesis, expression and/or stability  
PT of an mRNA encoding an angiogenic factors.  
XX Claim 54; Page 271; 305pp; English.  
XX The present invention describes enzymatic nucleic acid molecules with RNA  
CC cleaving activity, which specifically cleave RNA encoded by an aryl  
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
CC and AAA19155 to AAA19222 represent their corresponding target sequences;  
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme  
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and  
CC AAA21596 to AAA21688 represent their corresponding target sequences;  
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequences  
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
CC AAA23422 represent their corresponding target sequences. The ribozymes of  
CC the invention are used for modulating the synthesis, expression and/or  
CC stability of an mRNA encoding angiogenic factor, especially ARNT.  
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
CC especially used to treat cancer, diabetic retinopathy, age related  
CC macular degeneration (ARMD), inflammation, and arthritis, as well as  
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber  
CC syndrome, Kippel-Trenunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
CC integrin subunit alpha-6, or integrin subunit beta-3  
XX  
SQ Sequence 17 BP; 3 A; 3 C; 4 G; 0 T; 7 U; 0 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 7.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 808 ATTATCCACACGGAGAA 824  
DB 17 ATTATCCACACGGAGCA 1  
RESULT 928  
AAV92551  
ID AAV92551 standard; RNA; 17 BP.  
XX AAV92551;  
XX 18-FEB-1999 (first entry)  
XX Human A-Raf substrate position 1538.  
XX Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;  
KW target; substrate; catalyst; modulation; expression; Raf gene; delivery;  
KW screening; identification; synthesis; deprotection; purification; cancer;  
KW inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;  
KW restenosis; rheumatoid arthritis; ss.  
XX Homo sapiens.  
OS  
XX WO9850530-A2.  
XX 12-NOV-1998.  
XX 05-MAY-1998; 98WO-US009249.  
XX 09-MAY-1997; 97US-0046059P.  
XX 09-JUN-1997; 97US-0049002P.  
XX 03-JUL-1997; 97US-0051718P.  
XX 22-AUG-1997; 97US-0056808P.  
XX 02-OCT-1997; 97US-0061321P.

PR 02-OCT-1997; 97US-0061324P.  
PR 05-NOV-1997; 97US-0064866P.  
PR 19-DEC-1997; 97US-0068212P.  
XX (RIBO-) RIBOZYME PHARM INC.  
PA Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Bellon L;  
PI Parry T, Beigelman L, Mcswiggen JA, Karpelsky A, Burgin A;  
PI Thompson J, Workman CT, Beaudry A, Sweedler D;  
XX WPI; 1999-009494/01.  
XX Identifying new catalytic nucleic acid that modulates selected processes  
PT - especially ribozymes that cleave Raf RNA for treating cancer,  
PT restenosis, and also new ribozymes and modified nucleoside triphosphates  
PT used as antiviral agents and synthons.  
XX Claim 177; Page 160; 259pp; English.  
XX A method has been developed for the identification of a nucleic acid  
CC capable of modulating a process in a biological system. The method  
CC comprises: (a) introducing into the system a random library of nucleic  
CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising  
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC  
CC in systems where modulation has occurred and/or determining the sequence  
CC of at least part of the SBDs in such systems. Nucleic acid molecules with  
CC endonuclease activity and catalytic activity, from the present invention,  
CC are used to modulate gene expression in plant and mammalian cells and to  
CC cleave target nucleic acid, particularly for treating systemic diseases  
CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic  
CC ascites and infection. They may also be used to detect genetic drift and  
CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs  
CC with RNA-cleaving activity that modulate expression of the Raf gene, are  
CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or  
CC generally any condition associated with the level of c-raf. Introduction  
CC of sugar/phosphate modifications increases stability against nuclease and  
CC activity. AAV90922 to AAV93877 represent NACs that can be used in the  
CC method, specifically for modulating the expression of a Raf gene  
XX  
SQ Sequence 17 BP; 1 A; 3 C; 7 G; 0 T; 6 U; 0 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 58.8%; Pred. No. 7.3e+02;  
Matches 10; Conservative 5; Mismatches 2; Indels 0; Gaps 0;  
QY 1030 GCTGACTTTCGCTGGC 1046  
DB 1 GGUGACUUGGCUUGGC 17  
RESULT 929  
AAA36495  
ID AAA36495 standard; DNA; 17 BP.  
XX AAA36495;  
XX 26-JUL-2000 (first entry)  
XX Human genomic SNP allele specific oligonucleotide SEQ ID NO:560.  
XX Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;  
KW allele specific oligonucleotide; ASO; reduced complexity genome; RCG;  
KW genomic classification; identification; DNA fingerprinting;  
KW tumour characterisation; hybridisation; ss.  
XX Homo sapiens.  
OS  
XX WO200018960-A2.  
XX 06-APR-2000.  
XX 24-SEP-1999; 99WO-US022283.

PR 25-SEP-1998; 98US-0101757P.  
 XX  
 PA (MASI ) MASSACHUSETTS INST TECHNOLOGY.  
 XX  
 PI Landers JE, Jordan B, Housman DE, Charest A;  
 XX WPI; 2000-293181/25.  
 DR  
 XX Detection of single nucleotide polymorphisms in genomes by preparation  
 PT and analysis of reduced complexity genomes, useful for genotyping,  
 PT fingerprinting and determining allele frequency of SNPs.  
 XX  
 XX Disclosure; Page 69; 111pp; English.  
 XX  
 CC A method has been developed for detecting the presence or absence of a  
 CC single nucleotide polymorphism (SNP) allele in a genomic sample. The  
 CC method comprises preparing a reduced complexity genome (RCG) from the  
 CC genomic sample and analysing the RCG for the presence or absence of a SNP  
 CC allele. The method can be used to characterise a tumour, to generate a  
 CC genomic pattern for an individual genome or to generate a genomic  
 CC classification code for a genome. The method can be used to assess  
 CC whether a subject is at risk for developing a disease or to identify a  
 CC set of SNP alleles associated with a disease. The method can also be used  
 CC to perform linkage analysis. AAA35944 to AAA35947 represent sequences  
 CC used in the exemplification of the present invention. AAA35948 to  
 CC AAA36632 represent nucleotide sequences containing SNPs  
 XX  
 SQ Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 7.3e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1112 CTGACATCTCTGCTGGG 1128  
 DB 1 CTGACATCTCTGCTAGG 17  
 RESULT 930  
 AAA72376/c  
 ID AAA72376 standard; DNA; 17 BP.  
 XX  
 AC AAA72376;  
 XX  
 DT 19-DEC-2000 (first entry)  
 XX  
 DE Mouse angiotensin II type 2 receptor (AT2 receptor) PCR primer, AT2-R.  
 XX  
 KW Mouse angiotensin II type 2 receptor; AT2 receptor; vascular tissue;  
 KW transgenic animal; blood pressure regulation; PCR primer; ss.  
 XX  
 OS Mus sp.  
 XX  
 XX WO200045633-A1.  
 FN  
 XX 10-AUG-2000.  
 PD  
 XX 04-FEB-2000; 2000WO-JP000615.  
 PF  
 XX 05-FEB-1999; 99JP-00029354.  
 PR  
 XX (SUNR ) SUNTORY LTD.  
 PA  
 XX Kurihara T, Matsubara H;  
 PI  
 XX WPI; 2000-543434/49.  
 DR  
 XX Transgenic animals expressing angiotensin II2 receptor gene in vascular  
 PT tissue used as a model for studying function and blood pressure  
 PT regulatory activity of the receptor.  
 XX  
 XX Example 3; Page 9; 26pp; Japanese.  
 PS

CC The invention relates to transgenic animals which express the angiotensin  
 CC II type 2 receptor (AT2 receptor) gene in vascular tissue. The invention  
 CC also relates to a method for the production of transgenic animal of the  
 CC invention, comprising inserting the AT2 receptor gene into pluripotent  
 CC cells of the animal, implanting and bringing to term to give transgenic  
 CC animals whose descendants will also express the AT2 receptor gene. The  
 CC transgenic animal is a model system for the study of the vascular  
 CC function and blood pressure regulatory function of the AT2 receptor in  
 CC vivo or in vitro. It may also be used to study the competitive activity  
 CC of AT1 and AT2 receptors. Sequences AAA72375-A72376 represent PCR primers  
 CC used in an exemplification of the invention. The present sequence  
 CC represents a mouse AT2 receptor PCR primer  
 XX  
 SQ Sequence 17 BP; 2 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 7.3e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 949 TACTGCCACCGCAGAA 965  
 DB 17 TCTGCCACCGCAGAA 1  
 RESULT 931  
 AAF95069  
 ID AAF95069 standard; DNA; 17 BP.  
 XX  
 AC AAF95069;  
 XX  
 DT 23-MAY-2001 (first entry)  
 XX  
 DE Mutant capture oligonucleotide #62.  
 XX  
 KW Tubercle bacillus; drug sensitivity; drug resistance; rifampicin;  
 KW streptomycin; kanamycin; isoniazid; ethambutol; rpoB gene; rrs gene;  
 KW rpsL gene; inhA gene; katG gene; emsB gene; probe; PCR primer; ss.  
 XX  
 OS Mycobacterium tuberculosis.  
 XX  
 XX EP1076099-A2.  
 FN  
 XX 14-FEB-2001.  
 PD  
 XX 02-AUG-2000; 2000EP-00306563.  
 PF  
 XX 03-AUG-1999; 99JP-00220357.  
 PR  
 XX (NISN ) NISSHINBO IND INC.  
 PA (SYST-) SYSTEM RES INC.  
 PA  
 XX Suzuki Y, Nishida M, Takenishi S;  
 FI  
 XX WPI; 2001-246696/26.  
 DR  
 XX New oligonucleotides, nucleic acid probes and primers are useful for  
 PT differentiating drug-resistance and determining infection with tubercle  
 PT bacilli.  
 XX  
 XX Claim 16; Page 35; 114pp; English.  
 PS  
 CC The present invention relates to oligonucleotides based on nucleotide  
 CC sequences obtained from both wild-type tubercle bacilli (wtTB) that are  
 CC susceptible to a drug and mutant-type tubercle bacilli (mtTB) that are  
 CC resistant to a drug. The drugs used in the present invention are  
 CC rifampicin (RFP), streptomycin (SM), kanamycin (KM), isoniazid (INH) and  
 CC ethambutol (EB). The rpoB gene is responsible for resistance to RFP; the  
 CC rrs gene is responsible for resistance to SM and KM; the rpsL gene is  
 CC responsible for resistance to SM; the inhA gene is responsible for  
 CC resistance to INH; the katG gene is responsible for resistance to INH;  
 CC and the emsB gene is responsible for resistance to EB. The present  
 CC invention also relates to nucleic acid probes having part of a nucleotide  
 CC sequence of tubercle bacilli (TB) responsible for drug resistance and

CC primers used to generate the probes. The present sequence is an  
 CC oligonucleotide of the present invention. The oligonucleotides of the  
 CC present invention can be used to enable the differentiation of drug  
 CC resistance and the determination of infection with tubercle bacilli  
 CC simultaneously  
 XX SQ Sequence 17 BP; 1 A; 7 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 7.3e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1035 CTTTGGCTGCGCCGAG 1051  
 Db 1 CCTGGGCTGCGCCGAG 17  
 RESULT 933  
 ABN10018  
 ID ABN10018 standard; DNA; 17 BP.  
 XX AC ABN10018;  
 XX DT 29-MAY-2002 (first entry)  
 XX DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10010.  
 XX KW Human; genome-derived myosin-like protein 1; GDMPLP-1; heart;  
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
 KW skeletal muscle disorder; amplicon; screening; ss.  
 XX OS Homo sapiens.  
 XX PN WO200192524-A2.  
 XX PD 06-DEC-2001.  
 XX PF 25-MAY-2001; 2001WO-US016981.  
 XX PR 26-MAY-2000; 2000US-0207456P.  
 PR 21-SEP-2000; 2000US-0234687P.  
 PR 27-SEP-2000; 2000US-0236359P.  
 PR 04-OCT-2000; 2000GB-00024263.  
 PR 30-JAN-2001; 2001WO-US000661.  
 PR 30-JAN-2001; 2001WO-US000662.  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 30-JAN-2001; 2001WO-US000670.  
 PR 05-FEB-2001; 2001US-0266860P.  
 XX PA (AEOM-) AEOMICA INC.  
 XX PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
 XX WPI; 2002-179446/23.  
 XX DR New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
 XX PT or as specific biomolecule capture probes for surface-enhanced laser  
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
 XX PS Disclosure; SEQ ID NO 10010; 214pp; English.  
 XX CC The present invention describes a human genome-derived myosin-like  
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
 CC nucleic acids can be used as probes to detect, characterize and quantify  
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1

CC protein variants having desired phenotypic improvements, and for  
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
 CC -1 proteins, as standards in assays used to determine the concentration  
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
 CC capture probes for surface-enhanced laser desorption ionisation, as  
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMPLP-1, in particular heart  
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 XX SQ Sequence 17 BP; 1 A; 5 C; 8 G; 3 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 7.3e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 386 CGTCTCGGATGAGGTG 402  
 Db 1 CGTCTCGGATGAGGTG 17  
 RESULT 933  
 ABN08053  
 ID ABN08053 standard; DNA; 17 BP.  
 XX AC ABN08053;  
 XX DT 29-MAY-2002 (first entry)  
 XX DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8045.  
 XX KW Human; genome-derived myosin-like protein 1; GDMPLP-1; heart;  
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
 KW skeletal muscle disorder; amplicon; screening; ss.  
 XX OS Homo sapiens.  
 XX PN WO200192524-A2.  
 XX PD 06-DEC-2001.  
 XX PF 25-MAY-2001; 2001WO-US016981.  
 XX PR 26-MAY-2000; 2000US-0207456P.  
 PR 21-SEP-2000; 2000US-0234687P.  
 PR 27-SEP-2000; 2000US-0236359P.  
 PR 04-OCT-2000; 2000GB-00024263.  
 PR 30-JAN-2001; 2001WO-US000661.  
 PR 30-JAN-2001; 2001WO-US000662.  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 30-JAN-2001; 2001WO-US000670.  
 PR 05-FEB-2001; 2001US-0266860P.  
 XX PA (AEOM-) AEOMICA INC.  
 XX PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
 XX WPI; 2002-179446/23.  
 XX DR New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
 XX PT or as specific biomolecule capture probes for surface-enhanced laser  
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.



PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 05-FEB-2001; 2001US-0266860P.  
XX (AEOM-) AEOMICA INC.

PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;

XX WPI; 2002-179446/23.

XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.

XX Disclosure; SEQ ID NO 1526; 214pp; English.

XX The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
CC nucleic acids can be used as probes to detect, characterize and quantify  
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption/ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMPLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence

XX Sequence 17 BP; 3 A; 2 C; 9 G; 3 T; 0 U; 0 Other;

XX Query Match 0.8%; Score 13.8; DB 1; Length 17;  
XX Best Local Similarity 88.2%; Pred. No. 7.3e+02;  
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 986 AGCCCGACAGCACTGCTC 1002

DB 17 AGCCCCATCAGCTGCTC 1

RESULT 936

ABN10672/C

ID ABN10672 standard; DNA; 17 BP.

XX AC ABN10672;

XX 29-MAY-2002 (first entry)

XX Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10664.

XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;

XX skeletal muscle disorder; amplicon; screening; ss.

XX Homo sapiens.

XX WO200192524-A2.

XX 06-DEC-2001.

XX 25-MAY-2001; 2001WO-US016981.

XX 26-MAY-2000; 2000US-0207456P.

XX 21-SEP-2000; 2000US-0234687P.

XX 27-SEP-2000; 2000US-0236359P.

XX 04-OCT-2000; 2000GB-00024263.

XX 30-JAN-2001; 2001WO-US000661.

XX 30-JAN-2001; 2001WO-US000662.

XX 30-JAN-2001; 2001WO-US000663.

XX 30-JAN-2001; 2001WO-US000664.

XX 30-JAN-2001; 2001WO-US000665.

XX 30-JAN-2001; 2001WO-US000666.

XX 30-JAN-2001; 2001WO-US000667.

XX 30-JAN-2001; 2001WO-US000668.

XX 30-JAN-2001; 2001WO-US000669.

XX 05-FEB-2001; 2001US-0266860P.

XX (AEOM-) AEOMICA INC.

PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;

XX WPI; 2002-179446/23.

XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.

XX Disclosure; SEQ ID NO 10664; 214pp; English.

XX The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
CC nucleic acids can be used as probes to detect, characterize and quantify  
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption/ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMPLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence

XX Sequence 17 BP; 4 A; 7 C; 6 G; 0 T; 0 U; 0 Other;

XX Query Match 0.8%; Score 13.8; DB 1; Length 17;  
XX Best Local Similarity 88.2%; Pred. No. 7.3e+02;  
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1026 GCTGCTGACTTGGCC 1042

DB 17 GTGGCTGCTTGGCC 1

RESULT 937

ABN06803/c  
ID ABN06803 standard; DNA; 17 BP.  
AC ABN06803;  
XX  
XX 29-MAY-2002 (first entry)  
DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6795.  
XX  
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200192524-A2.  
XX  
XX 06-DEC-2001.  
XX  
XX 25-MAY-2001; 2001WO-US016981.  
XX  
XX 26-MAY-2000; 2000US-0207456P.  
XX  
XX 21-SEP-2000; 2000US-0234687P.  
XX  
XX 27-SEP-2000; 2000US-0236359P.  
XX  
XX 04-OCT-2000; 2000GB-00024263.  
XX  
XX 30-JAN-2001; 2001WO-US000661.  
XX  
XX 30-JAN-2001; 2001WO-US000662.  
XX  
XX 30-JAN-2001; 2001WO-US000663.  
XX  
XX 30-JAN-2001; 2001WO-US000664.  
XX  
XX 30-JAN-2001; 2001WO-US000665.  
XX  
XX 30-JAN-2001; 2001WO-US000666.  
XX  
XX 30-JAN-2001; 2001WO-US000667.  
XX  
XX 30-JAN-2001; 2001WO-US000668.  
XX  
XX 30-JAN-2001; 2001WO-US000669.  
XX  
XX 30-JAN-2001; 2001WO-US000670.  
XX  
XX 05-FEB-2001; 2001US-0266860P.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX WPI; 2002-179446/23.  
XX  
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
XX  
XX Disclosure; SEQ ID NO 6795; 21app; English.  
XX  
XX The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption/ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMPLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX  
XX Sequence 17 BP; 1 A; 2 C; 11 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.9; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. NO. 7.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 553 CCGCTCAGCGCGCGCT 569  
DB 17 CCCCACAGCCACCGCT 1  
RESULT 938  
ABQ63455/c  
ID ABQ63455 standard; DNA; 17 BP.  
XX  
XX AC ABQ63455;  
XX  
XX 20-AUG-2002 (first entry)  
XX  
XX Human KTOM1a portion (ABQ63232) probe # 168.  
XX  
XX Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic;  
KW gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;  
KW kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO200224750-A2.  
XX  
XX 28-MAR-2002.  
XX  
XX 21-SEP-2001; 2001WO-US029656.  
XX  
XX 21-SEP-2000; 2000US-0234687P.  
XX  
XX 27-SEP-2000; 2000US-0236359P.  
XX  
XX 04-OCT-2000; 2000GB-00024263.  
XX  
XX 30-JAN-2001; 2001WO-US000661.  
XX  
XX 30-JAN-2001; 2001WO-US000662.  
XX  
XX 30-JAN-2001; 2001WO-US000663.  
XX  
XX 30-JAN-2001; 2001WO-US000664.  
XX  
XX 30-JAN-2001; 2001WO-US000665.  
XX  
XX 30-JAN-2001; 2001WO-US000666.  
XX  
XX 30-JAN-2001; 2001WO-US000667.  
XX  
XX 30-JAN-2001; 2001WO-US000668.  
XX  
XX 30-JAN-2001; 2001WO-US000669.  
XX  
XX 30-JAN-2001; 2001WO-US000670.  
XX  
XX 23-MAY-2001; 2001US-00864761.  
XX  
XX 28-AUG-2001; 2001US-0315676P.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
XX Zhang J;  
XX WPI; 2002-479509/51.  
XX  
XX New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic  
PT acids encoding the protein, useful for treating subjects having defects  
PT in KTOM1 which can manifest as cancer of the kidney, or as a disorder of  
PT e.g., liver or bone.  
XX  
XX Example 2; Page 179; 418pp; English.  
XX  
XX The invention relates to a novel isolated nucleic acid encoding human  
CC KTOM1 (kidney tumor overexpressed membrane) protein. The protein of the  
CC invention has cytostatic activity. The nucleotide may have a use in gene  
CC therapy. The KTOM1 nucleic acids may be used to diagnose, treat or  
CC monitor a disease caused by altered expression of human KTOM1.  
CC Compositions comprising the nucleic acids, proteins or antibodies may be  
CC used to treat subjects having defects in KTOM1 which can manifest as  
CC cancer of the kidney, as well as a disorder of liver, bone marrow, brain,  
CC heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta  
CC function. The sequence represents a probe used in the invention to scan  
CC the nt 1-1001 portion of human KTOM1a (ABQ63232)  
XX

SQ Sequence 17 BP; 5 A; 8 C; 2 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 7.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1397 AGCTGTTTCAGTTTCAG 1413  
DB 17 AGCTGTTTCAGTTGGG 1

RESULT 939  
ABK18593  
ID ABK18593 standard; RNA; 17 BP.  
XX AC ABK18593;  
XX DT 09-APR-2002 (first entry)  
XX DE Human ERG G-cleaver ribozyme target sequence Seq ID No 1240.  
XX KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
KW vulvar; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
KW angiofibroma of tuberosus scleriosis; port-wine stain; wound healing;  
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNazyme; inozyme;  
KW amberzyme.  
XX OS Homo sapiens.  
XX KW WO200188124-A2.  
XX PN 22-NOV-2001.  
XX PD 16-MAY-2001; 2001WO-US015866.  
XX PF 16-MAY-2000; 2000US-00572021.  
XX PR (RIBO-) RIBOZYME PHARM INC.  
XX PA (GLAX) GLAXO GROUP LTD.  
XX PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
XX PI WPI; 2002-082995/11.  
XX PS Novel polynucleotide which down regulates expression of Ets-related gene,  
XX useful for treating cancer, diabetic retinopathy, macular degeneration,  
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
XX Claim 4; Page 82; 149pp; English.

XX The invention relates to a nucleic acid molecule (I) which down regulates  
XX expression of an Ets-related gene (ERG). (I) is useful for treating  
XX conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
XX tumour angiogenesis, diabetic retinopathy, macular degeneration,  
XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
XX vulgaris, angiofibroma of tuberosus scleriosis, port-wine stains, Sturge  
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
XX syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
XX treating a patient having a condition associated with the level of ERG,  
XX by contacting cells of the patient with (I) under conditions suitable for  
XX the treatment. The method comprises the use of one or more therapies  
XX under conditions suitable for the treatment. Leukaemia or tumour  
XX angiogenesis is treated by administering (I) to the patient in  
XX conjunction with one or more of other therapies such as radiation or  
XX chemotherapy treatment. (I) is useful for reducing ERG activity in a  
XX cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
XX ERG gene, by contacting (I) with RNA, in the presence of a divalent  
XX cation such as Mg<sup>2+</sup>. (I) is useful for diagnosis of conditions and  
XX diseases related to the expression of ERG, and as diagnostic tool to

CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of ERG RNA in a cell. (I) is useful for specifically  
CC targeting genes that share homology with ERG gene or ERG fusion genes.  
CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
CC related PCR primers of the invention  
XX SQ Sequence 17 BP; 1 A; 9 C; 4 G; 0 T; 3 U; 0 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 70.6%; Pred. No. 7.3e+02;  
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;  
QY 557 TCAGCGCGCGCTCCGT 573  
DB 1 UCAGCGCGCGCCUCCGU 17

RESULT 940  
ABK18786  
ID ABK18786 standard; RNA; 17 BP.  
XX AC ABK18786;  
XX DT 09-APR-2002 (first entry)  
XX DE Human ERG DNazyme target sequence Seq ID No 1433.  
XX KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
KW vulvar; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
KW angiofibroma of tuberosus scleriosis; port-wine stain; wound healing;  
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNazyme; inozyme;  
KW amberzyme.  
XX OS Homo sapiens.  
XX KW WO200188124-A2.  
XX PN 22-NOV-2001.  
XX PD 16-MAY-2001; 2001WO-US015866.  
XX PF 16-MAY-2000; 2000US-00572021.  
XX PR (RIBO-) RIBOZYME PHARM INC.  
XX PA (GLAX) GLAXO GROUP LTD.  
XX PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
XX PI WPI; 2002-082995/11.  
XX PS Novel polynucleotide which down regulates expression of Ets-related gene,  
XX useful for treating cancer, diabetic retinopathy, macular degeneration,  
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
XX Claim 4; Page 91; 149pp; English.

XX The invention relates to a nucleic acid molecule (I) which down regulates  
XX expression of an Ets-related gene (ERG). (I) is useful for treating  
XX conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
XX tumour angiogenesis, diabetic retinopathy, macular degeneration,  
XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
XX vulgaris, angiofibroma of tuberosus scleriosis, port-wine stains, Sturge  
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
XX syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
XX treating a patient having a condition associated with the level of ERG,  
XX by contacting cells of the patient with (I) under conditions suitable for  
XX the treatment. The method comprises the use of one or more therapies  
XX under conditions suitable for the treatment. Leukaemia or tumour  
XX angiogenesis is treated by administering (I) to the patient in  
XX conjunction with one or more of other therapies such as radiation or  
XX chemotherapy treatment. (I) is useful for reducing ERG activity in a  
XX cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
XX ERG gene, by contacting (I) with RNA, in the presence of a divalent  
XX cation such as Mg<sup>2+</sup>. (I) is useful for diagnosis of conditions and  
XX diseases related to the expression of ERG, and as diagnostic tool to



CC angiogenesis is treated by administering (I) to the patient in  
 CC conjunction with one or more of other therapies such as radiation or  
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
 CC cation such as Mg<sup>2+</sup>. (I) is useful for diagnosis of conditions and  
 CC diseases related to the expression of ERG, and as diagnostic tool to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of ERG RNA in a cell. (I) is useful for specifically  
 CC targeting genes that share homology with ERG gene or ERG fusion genes.  
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
 CC related PCR primers of the invention  
 XX  
 SQ Sequence 17 BP; 4 A; 5 C; 6 G; 0 T; 2 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 76.5%; Pred. No. 7.3e+02;  
 Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
 QY 705 GGAGATCAGACTGGAC 721  
 Db 1 GGAGATCAGCTCAAGC 17  
 RESULT 941  
 ABS75050  
 ID ABS75050 standard; DNA; 17 BP.  
 XX  
 AC ABS75050;  
 XX  
 DT 24-DEC-2002 (first entry)  
 XX  
 DE Human PAPP-Ea associated 17-mer SEQ ID 576.  
 XX  
 KW PAPP-E; human; pregnancy associated plasma protein E; abortive;  
 KW contraceptive; Gene therapy; vaccine; pregnancy; antenatal; diagnosis;  
 KW dysgenetic pregnancy; primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FN US2002102252-A1.  
 XX  
 PD 01-AUG-2002.  
 XX  
 PF 06-APR-2001; 2001US-00827998.  
 XX  
 PR 26-MAY-2000; 2000US-0207456P.  
 XX  
 XX (GUY/) GU Y.  
 XX (SHAN/) SHANNON M E.  
 XX Gu Y, Shannon ME;  
 XX WPI; 2002-697817/75.  
 XX  
 PT New isolated nucleic acid encoding an isoform of human pregnancy  
 PT associated plasma protein E, for preventing or aborting pregnancy.  
 XX  
 PS Example 2; Page 151; 353pp; English.  
 XX  
 CC This invention describes a novel isolated nucleic acid that encodes one  
 CC of three new isoforms of human pregnancy associated plasma protein E,  
 CC hPAPP-E. The products of the invention have abortive and contraceptive  
 CC activity and can be used for gene therapy or in a vaccine. The nucleic  
 CC acid, polypeptide encoded by it, or antibody to the polypeptide can be  
 CC used in pharmaceutical compositions or vaccines for preventing or  
 CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of  
 CC dysgenetic pregnancies. The nucleic acids are used as probes to assess  
 CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the  
 CC antibodies can be used to assess the expression levels of PAPP-E isoform  
 CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies  
 CC antenatally. This sequence represents an oligomer used in scanning the

CC human PAPP-E genes described in the disclosure of the invention  
 XX  
 SQ Sequence 17 BP; 6 A; 2 C; 8 G; 1 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 7.3e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1011 GAGGGAGAGCTCAAGC 1027  
 Db 1 GAGGGAGAGGTCACG 17  
 RESULT 942  
 ABS75049  
 ID ABS75049 standard; DNA; 17 BP.  
 XX  
 AC ABS75049;  
 XX  
 DT 24-DEC-2002 (first entry)  
 XX  
 DE Human PAPP-Ea associated 17-mer SEQ ID 575.  
 XX  
 KW PAPP-E; human; pregnancy associated plasma protein E; abortive;  
 KW contraceptive; Gene therapy; vaccine; pregnancy; antenatal; diagnosis;  
 KW dysgenetic pregnancy; primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FN US2002102252-A1.  
 XX  
 PD 01-AUG-2002.  
 XX  
 PF 06-APR-2001; 2001US-00827998.  
 XX  
 PR 26-MAY-2000; 2000US-0207456P.  
 XX  
 XX (GUY/) GU Y.  
 XX (SHAN/) SHANNON M E.  
 XX Gu Y, Shannon ME;  
 XX WPI; 2002-697817/75.  
 XX  
 PT New isolated nucleic acid encoding an isoform of human pregnancy  
 PT associated plasma protein E, for preventing or aborting pregnancy.  
 XX  
 PS Example 2; Page 150; 353pp; English.  
 XX  
 CC This invention describes a novel isolated nucleic acid that encodes one  
 CC of three new isoforms of human pregnancy associated plasma protein E,  
 CC hPAPP-E. The products of the invention have abortive and contraceptive  
 CC activity and can be used for gene therapy or in a vaccine. The nucleic  
 CC acid, polypeptide encoded by it, or antibody to the polypeptide can be  
 CC used in pharmaceutical compositions or vaccines for preventing or  
 CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of  
 CC dysgenetic pregnancies. The nucleic acids are used as probes to assess  
 CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the  
 CC antibodies can be used to assess the expression levels of PAPP-E isoform  
 CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies  
 CC antenatally. This sequence represents an oligomer used in scanning the  
 CC human PAPP-E genes described in the disclosure of the invention  
 XX  
 SQ Sequence 17 BP; 7 A; 1 C; 8 G; 1 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 7.3e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1010 AGAGGGAGAGCTCAAG 1026  
 Db 1 AGAGGGAGAGGTCACG 17



RESULT 943  
ABV89395/C  
ID ABV89395 standard; DNA; 17 BP.

XX  
AC ABV89395;  
XX

XX  
DT 23-DEC-2002 (first entry)  
XX

XX  
DE Human POSHL1 scanning oligonucleotide SEQ ID NO 108.  
XX

XX  
KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
KW gene therapy; transgenic; ss.

XX  
OS Homo sapiens.  
XX

XX  
FN EP1239051-A2.  
XX

XX  
PD 11-SEP-2002.  
XX

XX  
PF 28-JAN-2002; 2002EP-00001165.  
XX

XX  
PR 30-JAN-2001; 2001WO-US0000663.  
PR

PR  
PR 30-JAN-2001; 2001WO-US0000664.  
PR

PR  
PR 30-JAN-2001; 2001WO-US0000665.  
PR

PR  
PR 30-JAN-2001; 2001WO-US0000666.  
PR

PR  
PR 30-JAN-2001; 2001WO-US0000667.  
PR

PR  
PR 30-JAN-2001; 2001WO-US0000668.  
PR

PR  
PR 30-JAN-2001; 2001WO-US0000669.  
PR

PR  
PR 30-JAN-2001; 2001WO-US0000670.  
PR

PR  
PR 23-MAY-2001; 2001WO-US0000671.  
PR

PR  
PR 10-OCT-2001; 2001US-0328205P.  
PR

XX  
PA (AEOM-) AEOMICA INC.  
XX

XX  
PI Shannon M;  
XX

XX  
DR WPI; 2002-684061/74.  
XX

XX  
XX  
PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
PT -1, useful for treating disorders associated with decreased expression or  
PT activity of human POSHL1.

XX  
XX  
PS Example 2; SEQ ID NO 108; 60pp + Sequence Listing; English.

XX  
XX  
CC The invention relates to an isolated SH3 domain (POSH)-like signalling  
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
CC acids (S1, AB883999), a sequence having 65% sequence identity to (S1),  
CC (S1) having 95% deviations, especially conservative substitutions or a  
CC fragment of the sequences comprising at least 8 contiguous amino acids.  
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
CC adaptor protein that interacts with Rho family small GTPases as well as  
CC downstream components of the signal transduction pathway. (I) is useful  
CC for identifying a specific binding partner. (II) and nucleic acids (II)  
CC encoding (I) are useful for diagnosing, monitoring disease and treating  
CC caused by altered expression of human POSHL1 including diagnosing and  
CC treating cancer, they are useful in the development of vaccines and (II) is  
CC useful in gene therapy. (II) is useful for constructing microarrays which  
CC are useful for measuring and for surveying gene expression and creating  
CC transgenic non-human animals capable of producing the proteins. The  
CC present sequence is that of a scanning oligonucleotide useful in examples  
CC of the invention. Note: The present sequence did not form part of the  
CC printed specification, but is based on sequence information supplied to  
CC Derwent by the European Patent Office

XX  
SQ Sequence 17 BP; 3 A; 2 C; 11 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 7.3e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 556 CTCAGCGCGCGCTCCG 572

Db 17 CTCAGCGCGCGCTCCG 1

RESULT 944

ABV89567/C

ID ABV89567 standard; DNA; 17 BP.

XX  
AC ABV89567;  
XX

XX  
DT 23-DEC-2002 (first entry)  
XX

XX  
DE Human POSHL1 scanning oligonucleotide SEQ ID NO 280.  
XX

XX  
KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
KW gene therapy; transgenic; ss.

XX  
OS Homo sapiens.  
XX

XX  
FN EP1239051-A2.  
XX

XX  
PD 11-SEP-2002.  
XX

XX  
PF 28-JAN-2002; 2002EP-00001165.  
XX

XX  
PR 30-JAN-2001; 2001WO-US0000663.  
PR

PR  
PR 30-JAN-2001; 2001WO-US0000664.  
PR

PR  
PR 30-JAN-2001; 2001WO-US0000665.  
PR

PR  
PR 30-JAN-2001; 2001WO-US0000666.  
PR

PR  
PR 30-JAN-2001; 2001WO-US0000667.  
PR

PR  
PR 30-JAN-2001; 2001WO-US0000668.  
PR

PR  
PR 30-JAN-2001; 2001WO-US0000669.  
PR

PR  
PR 30-JAN-2001; 2001WO-US0000670.  
PR

PR  
PR 23-MAY-2001; 2001US-00864761.  
PR

PR  
PR 10-OCT-2001; 2001US-0328205P.  
PR

XX  
PA (AEOM-) AEOMICA INC.  
XX

XX  
PI Shannon M;  
XX

XX  
DR WPI; 2002-684061/74.  
XX

XX  
PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
PT -1, useful for treating disorders associated with decreased expression or  
PT activity of human POSHL1.

XX  
XX  
PS Example 2; SEQ ID NO 280; 60pp + Sequence Listing; English.

XX  
XX  
CC The invention relates to an isolated SH3 domain (POSH)-like signalling  
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
CC acids (S1, AB883999), a sequence having 65% sequence identity to (S1),  
CC (S1) having 95% deviations, especially conservative substitutions or a  
CC fragment of the sequences comprising at least 8 contiguous amino acids.  
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
CC adaptor protein that interacts with Rho family small GTPases as well as  
CC downstream components of the signal transduction pathway. (I) is useful  
CC for identifying a specific binding partner. (II) and nucleic acids (II)  
CC encoding (I) are useful for diagnosing, monitoring disease and treating  
CC caused by altered expression of human POSHL1 including diagnosing and  
CC treating cancer, they are useful in the development of vaccines and (II) is  
CC useful in gene therapy. (II) is useful for constructing microarrays which  
CC are useful for measuring and for surveying gene expression and creating  
CC transgenic non-human animals capable of producing the proteins. The  
CC present sequence is that of a scanning oligonucleotide useful in examples  
CC of the invention. Note: The present sequence did not form part of the  
CC printed specification, but is based on sequence information supplied to  
CC Derwent by the European Patent Office

XX  
SQ Sequence 17 BP; 2 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 7.3e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 596 GGCACTCAGGAGATCA 712  
17 GGCACTCAGGAGATCA 1

Db

RESULT 945  
ABV91270  
ID ABV91270 standard; DNA; 17 BP.  
XX  
AC ABV91270;  
DT 23-DEC-2002 (first entry)  
XX  
DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1983.  
XX  
KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
KW gene therapy; transgenic; ss.  
XX  
OS Homo sapiens.  
XX  
PN EPI239051-A2.  
XX  
PD 11-SEP-2002.  
XX  
PF 28-JAN-2002; 2002EP-00001165.  
XX  
PR 30-JAN-2001; 2001WO-US0000663.  
PR 30-JAN-2001; 2001WO-US0000664.  
PR 30-JAN-2001; 2001WO-US0000665.  
PR 30-JAN-2001; 2001WO-US0000666.  
PR 30-JAN-2001; 2001WO-US0000667.  
PR 30-JAN-2001; 2001WO-US0000668.  
PR 30-JAN-2001; 2001WO-US0000669.  
PR 30-JAN-2001; 2001WO-US0000670.  
PR 23-MAY-2001; 2001US-00864761.  
PR 10-OCT-2001; 2001US-0328205P.  
XX  
PA (ABOM-) AEOMICA INC.  
XX  
PI Shannon M;  
XX  
PI WPI; 2002-684061/74.  
XX  
DR Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
PT -1, useful for treating disorders associated with decreased expression or  
PT activity of human POSHL1.  
XX  
PS Example 2; SEQ ID NO 1983; 60pp + Sequence Listing; English.  
XX  
CC The invention relates to an isolated SH3 domain (POSH)-like signalling  
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
CC acids (SI, ABB83999), a sequence having 65% sequence identity to (SI),  
CC (SI) having 95% deviations, especially conservative substitutions or a  
CC fragment of the sequences comprising at least 8 contiguous amino acids.  
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
CC adaptor protein that interacts with Rho family small GTPases as well as  
CC downstream components of the signal transduction pathway. (I) is useful  
CC for identifying a specific binding partner. (I) and nucleic acids (II)  
CC encoding (I) are useful for diagnosing, monitoring disease and treating  
CC caused by altered expression of human POSHL1 including diagnosing and  
CC treating cancer, they are useful in the development of vaccines and (II) is  
CC useful in gene therapy. (II) is useful for constructing microarrays which  
CC are useful for measuring and for surveying gene expression and creating  
CC transgenic non-human animals capable of producing the proteins. The  
CC present sequence is that of a scanning oligonucleotide useful in examples  
CC of the invention. Note: The present sequence did not form part of the  
CC printed specification, but is based on sequence information supplied to  
CC Derwent by the European Patent Office  
XX  
SQ Sequence 17 BP; 2 A; 8 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 7.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1662 CCCTCAGGGGAGGCC 1678  
1 CCCTCAGGGGAGGCC 17

Db

RESULT 946  
ABK56437  
ID ABK56437 standard; RNA; 17 BP.  
XX  
AC ABK56437;  
DT 02-JUL-2002 (first entry)  
XX  
DE Human CLCAL gene enzymatic nucleic acid #808.  
XX  
KW Human; chloride channel calcium activated 1; CLCAL; ss; antiaesthetic;  
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
KW acetylcysteine.  
XX  
OS Homo sapiens.  
XX  
PN WO200211674-A2.  
XX  
PD 14-FEB-2002.  
XX  
PF 09-AUG-2001; 2001WO-US024970.  
XX  
PR 09-AUG-2000; 2000US-0224383P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA (SYNT) SYNTAX USA LLC.  
PA (THOM/) THOMPSON J.  
XX  
PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski D;  
PI Grupe A;  
XX  
PI WPI; 2002-217145/27.  
XX  
DR Enzymatic polynucleotide that down regulates expression of chloride  
PT channel calcium activated gene, useful for treating chronic obstructive  
PT pulmonary disease (COPD), chronic bronchitis and asthma.  
XX  
PS Claim 4; Page 70; 152pp; English.  
XX  
CC The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCAL) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic  
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
CC that are related to or will respond to the levels of CLCAL in a cell or  
CC tissue. The sequences are useful for reducing CLCAL activity in a cell,  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCAL, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCAL RNA in a cell. This sequence represents an  
CC enzymatic nucleic acid molecule of the invention  
XX  
SQ Sequence 17 BP; 6 A; 5 C; 4 G; 0 T; 2 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 76.5%; Pred. No. 7.3e+02;

|            |                      |                       |                 |                 |              |                  |                           |           |             |
|------------|----------------------|-----------------------|-----------------|-----------------|--------------|------------------|---------------------------|-----------|-------------|
| Matches    | 13;                  | Conservative          | 2;              | Mismatches      | 2;           | Indels           | 0;                        | Gaps      | 0;          |
| QY         | 1571                 | ACTCAGGAGCCGAGCT      | 1587            |                 |              |                  |                           |           |             |
|            |                      | :                :    |                 |                 |              |                  |                           |           |             |
| DB         | 1                    | AAUCAAGCAGCCGACU      | 17              |                 |              |                  |                           |           |             |
| RESULT 947 |                      |                       |                 |                 |              |                  |                           |           |             |
| ABKS7127   |                      |                       |                 |                 |              |                  |                           |           |             |
| ID         | ABKS7127             | standard; RNA; 17 BP. |                 |                 |              |                  |                           |           |             |
| XX         | AC                   | XX                    |                 |                 |              |                  |                           |           |             |
| XX         | ABKS7127;            |                       |                 |                 |              |                  |                           |           |             |
| XX         | 02-JUL-2002          | (first entry)         |                 |                 |              |                  |                           |           |             |
| XX         | Human                | CLCA1                 | gene            | enzymatic       | nucleic      | acid             | #1498.                    |           |             |
| XX         | Human;               | chloride              | channel         | calcium         | activated    | 1;               | CLCA1; ss; antiasthmatic; |           |             |
| XX         | antiinflammatory;    | chronic               | obstructive     | pulmonary       | disease;     | COPD; asthma;    |                           |           |             |
| XX         | chronic              | bronchitis;           | cystic          | fibrosis;       | obstructive  | bowel            | syndrome;                 |           |             |
| XX         | oxygen               | therapy;              | bronchodilator; | corticosteroid; | vaccination; | mucokinetic;     |                           |           |             |
| XX         | acetylcysteine.      |                       |                 |                 |              |                  |                           |           |             |
| XX         | Homo                 | sapiens.              |                 |                 |              |                  |                           |           |             |
| OS         | XX                   |                       |                 |                 |              |                  |                           |           |             |
| XX         | WO200211674-A2.      |                       |                 |                 |              |                  |                           |           |             |
| PN         | XX                   |                       |                 |                 |              |                  |                           |           |             |
| PD         | 14-FEB-2002.         |                       |                 |                 |              |                  |                           |           |             |
| XX         | XX                   |                       |                 |                 |              |                  |                           |           |             |
| PF         | 09-AUG-2001;         | 2001WO-US024970.      |                 |                 |              |                  |                           |           |             |
| XX         | XX                   |                       |                 |                 |              |                  |                           |           |             |
| PR         | 09-AUG-2000;         | 2000US-0224383P.      |                 |                 |              |                  |                           |           |             |
| XX         | XX                   |                       |                 |                 |              |                  |                           |           |             |
| PA         | (RIBO-) RIBOZYME     | PHARM INC.            |                 |                 |              |                  |                           |           |             |
| PA         | (SYNT )              | SYNTEX USA LLC.       |                 |                 |              |                  |                           |           |             |
| PA         | (THOM/)              | THOMPSON J.           |                 |                 |              |                  |                           |           |             |
| XX         | Thompson J,          | Mcswiggen J,          | Mckenzie T,     | Ayers D,        | Szymkowski   | DE;              |                           |           |             |
| PI         | Grupe A;             |                       |                 |                 |              |                  |                           |           |             |
| XX         | XX                   |                       |                 |                 |              |                  |                           |           |             |
| DR         | WPI; 2002-217145/27. |                       |                 |                 |              |                  |                           |           |             |
| XX         | Enzymatic            | polynucleotide        | that            | down            | regulates    | expression       | of                        | chloride  |             |
| PT         | channel              | calcium               | activated       | gene,           | useful       | for              | treating                  | Chronic   | obstructive |
| PT         | pulmonary            | disease (COPD),       | chronic         | bronchitis      | and          | asthma.          |                           |           |             |
| XX         | Claim                | 4;                    | Page            | 96;             | 152pp;       | English.         |                           |           |             |
| XX         | The                  | invention             | relates         | to              | enzymatic    | nucleic          | acid                      | molecules | that        |
| CC         | regulate             | expression            | of              | chloride        | channel      | calcium          | activated                 | 1 (CLCA1) | genes       |
| CC         | by                   | cleaving              | RNA             | derived         | from         | the              | genes.                    | The       | nucleic     |
| CC         | useful               | as                    | pharmaceutical  | agents          | for          | treating         | conditions                | such      | as          |
| CC         | obstructive          | pulmonary             | disease (COPD), | chronic         | bronchitis,  | asthma,          | cystic                    |           |             |
| CC         | fibrosis,            | obstructive           | bowel           | syndrome        | and          | any              | other                     | diseases  | or          |
| CC         | that                 | are                   | related         | to              | or           | will             | respond                   | to        | the         |
| CC         | tissue.              | The                   | sequences       | are             | useful       | for              | reducing                  | CLCA1     | activity    |
| CC         | hence,               | are                   | useful          | for             | treatment    | of               | a                         | patient   | having      |
| CC         | associated           | with                  | the             | level           | of           | CLCA1,           | where                     | the       | invention   |
| CC         | the                  | use                   | of              | one             | or           | more             | therapies                 | under     | conditions  |
| CC         | treatment,           | for                   | example,        | oxygen          | therapy,     | bronchodilators, | corticosteroids,          |           |             |
| CC         | antibacterials,      | vaccinations,         | acetylcysteine  | and             | mucokinetic  | agents.          | The                       |           |             |
| CC         | nucleic              | acids                 | of              | the             | invention    | are              | also                      | used      | as          |
| CC         | examine              | genetic               | drift           | and             | mutations    | within           | diseased                  | cells     | or          |
| CC         | the                  | presence              | of              | CLCA1           | RNA          | in               | a                         | cell.     | This        |
| XX         | enzymatic            | nucleic               | acid            | molecule        | of           | the              | invention                 |           |             |
| XX         | Sequence             | 17                    | BP;             | 6               | A;           | 4                | C;                        | 5         | G;          |
| XX         | 0.8%;                | Score                 | 13.8;           | DB              | 1;           | Length           | 17;                       |           |             |
| XX         | Best                 | Local                 | Similarity      | 76.5%;          | Pred.        | No.              | 7.3e+02;                  |           |             |
| XX         | Matches              | 13;                   | Conservative    | 2;              | Mismatches   | 2;               | Indels                    | 0;        | Gaps        |
| QY         | 1569                 | TGACTCAGGCGCCAG       | 1585            |                 |              |                  |                           |           |             |

Db 1 UGAUCAAGCAGGCGAG 17  
:  
||| :|| |||||||

RESULT 948  
ABK56438  
ABK56438 standard; RNA; 17 BP.  
XX AC ABK56438;  
XX DT 02-JUL-2002 (first entry)  
XX DE Human CLCA1 gene enzymatic nucleic acid #809.  
XX KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
KW KX antinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
KW XW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
KW KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
KW acetylcysteine.  
XX OS Homo sapiens.  
OS WO200211674-A2.  
PN 14-FEB-2002.  
XX PD 09-AUG-2001; 2001WO-US024970.  
XX PF 09-AUG-2000; 2000US-0224383P.  
XX PR (RIBO-) RIBOZYME PHARM INC.  
PA PA (SYN-) SYNTEX USA LLC.  
PA PA (THON/) THOMPSON J.  
XX XX Thompson J, Mcswiggen J, Mckenzie T, Ayers D, Szymkowski DE;  
PI Grupe A;  
PI WPI; 2002-217145/27.  
XX DR Enzymatic polynucleotide that down regulates expression of chloride  
PT channel calcium activated gene, useful for treating Chronic obstructive  
PT pulmonary disease (COPD), chronic bronchitis and asthma.  
XX PT Claim 4; Page 70; 152pp; English.

CC The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic  
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
CC that are related to or will respond to the levels of CLCA1 in a cell or  
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCA1, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCA1 RNA in a cell. This sequence represents an  
CC enzymatic nucleic acid molecule of the invention  
XX SQ Sequence 17 BP; 4 A; 5 C; 4 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 70.6%; Pred. No. 7,3e+02;  
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0

QY 1575 AGCAGGCCAGCTTTC 1591  
DB 1 AAGCAGGCCAGCUUUC 17  
:|||::|:

```
RESULT 949
ADB03435
ID ADB03435 standard; DNA; 17 BP.
XX
AC ADB03435;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human MD27 scanning oligonucleotide SEQ ID 4421.
XX
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
OS Homo sapiens.
XX
PN EPI281758-A2.
XX
PD 05-FEB-2003.
XX
XX 30-JUL-2002; 2002EP-00016974.
XX
XX 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX
DR WPI; 2003-423107/40.
XX
PT New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MD23,
PT MD24, MD27 or MD212, e.g. cancer.
XX
XX Example 8; SEQ ID NO 4421; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
XX proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
XX encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
XX MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
XX 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
XX or in manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MD23,
XX MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
XX acids and proteins are also useful for diagnosing or monitoring a disease
XX caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
XX acids can also be used as probes to detect and characterize gross
XX alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
XX useful in constructing microarrays for measuring gene expression. The
XX proteins are useful as therapeutic agents for gene therapy or as
XX vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 0 A; 10 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 7.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 921 CCTGTTCCAGTGTCTCC 937
DB 1 CCTGTTCCAGTGTCTCC 17
RESULT 950
ABZ59905/C
ID ABZ59905 standard; RNA; 17 BP.
XX
AC ABZ59905;
XX
XX ABZ59905;
XX
DT 21-MAR-2003 (first entry)
```

```
XX
DE Human K-Ras DNzyme substrate #17.
XX
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.
XX
PN WO200297114-A2.
XX
PD 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
XX
XX 06-JUN-2001; 2001US-0296249P.
XX
XX 10-SEP-2001; 2001US-0318471P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J;
XX
XX WPI; 2003-140484/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
XX treating cancer, modulates the expression of a nucleic acid encoding
XX HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 58; Page 85; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
XX acid molecule or an enzymatic nucleic acid molecule, that modulates
XX expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX rheumatic activity. The nucleic acid molecules are useful for reducing
XX HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX also useful for treating breast, ovarian, colorectal, lung, prostate,
XX bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ65520 - ABZ65524,
XX ABZ65530 - ABZ65589 represent substrate/target sequences for the human
XX ribozymes of the invention
XX
SQ Sequence 17 BP; 2 A; 4 C; 9 G; 0 T; 2 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 7.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 559 AGCGCGCGCTCGTTCG 575
DB 17 AGCGCGCGCACCTTCG 1
RESULT 951
ABZ65100
ID ABZ65100 standard; RNA; 17 BP.
XX
AC ABZ65100;
XX
XX 21-MAR-2003 (first entry)
XX
DE Human HER2 DNzyme substrate #557.
XX
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.
XX
PN WO200297114-A2.
XX
```

PD 05-DEC-2002.  
XX 29-MAY-2002; 2002WO-US016840.  
XX 29-MAY-2001; 2001US-0294140P.  
PR 06-JUN-2001; 2001US-0296249P.  
PR 10-SEP-2001; 2001US-0318471P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX PA  
XX Mcswiggen J;  
XX WPI; 2003-140484/13.  
XX Novel short interfering RNA and enzymatic nucleic acid useful for  
PT treating cancer, modulates the expression of a nucleic acid encoding  
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
XX Claim 4; Page 143; 185pp; English.  
XX The invention relates to a novel short interfering RNA (siRNA) nucleic  
CC acid molecule or an enzymatic nucleic acid molecule, that modulates  
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,  
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-  
CC rheumatic activity. The nucleic acid molecules are useful for reducing  
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human  
CC ribozymes of the invention  
XX  
SQ Sequence 17 BP; 6 A; 5 C; 4 G; 0 T; 2 U; 0 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 76.5%; Pred. No. 7.3e+02;  
Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
QY 654 CACCGTCTCAAGGCA 670  
DB 1 CACAGUCUACAGGGCA 17  
RESULT 952  
ABZ62059/C  
ID ABZ62059 standard; RNA; 17 BP.  
XX  
XX ABZ62059;  
XX  
XX 21-MAR-2003 (first entry)  
XX  
XX Human H-Ras DNzyme target #850.  
XX  
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
XX enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;  
XX anti-rheumatic; cancer; AIDS; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO200297114-A2.  
XX  
XX 05-DEC-2002.  
XX  
XX 29-MAY-2002; 2002WO-US016840.  
XX  
XX 29-MAY-2001; 2001US-0294140P.  
PR 06-JUN-2001; 2001US-0296249P.  
PR 10-SEP-2001; 2001US-0318471P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX PA  
XX Mcswiggen J;  
PI

XX WPI; 2003-140484/13.  
XX Novel short interfering RNA and enzymatic nucleic acid useful for  
PT treating cancer, modulates the expression of a nucleic acid encoding  
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
XX Claim 58; Page 129; 185pp; English.  
XX The invention relates to a novel short interfering RNA (siRNA) nucleic  
CC acid molecule or an enzymatic nucleic acid molecule, that modulates  
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,  
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-  
CC rheumatic activity. The nucleic acid molecules are useful for reducing  
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human  
CC ribozymes of the invention  
XX  
SQ Sequence 17 BP; 1 A; 6 C; 7 G; 0 T; 3 U; 0 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 7.3e+02;  
Matches 15; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
QY 1627 GCCCCCACGACGCGCG 1643  
DB 17 GCCCCCACGACGCGCATG 1  
RESULT 953  
ACD59940  
ID ACD59940 standard; RNA; 17 BP.  
XX  
XX ACD59940;  
XX  
XX 24-SEP-2003 (first entry)  
XX  
XX HCV DNzyme substrate sequence #1574.  
XX  
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
XX RNA stability; RNA expression; RNA synthesis; antisense;  
XX enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;  
XX amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
XX HBV reverse transcriptase; Enhancer I region; viral replication;  
XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
XX liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
XX virucide; antiinflammatory; substrate; ss.  
XX  
XX Hepatitis C virus.  
XX  
XX WO200281494-A1.  
XX  
XX 17-OCT-2002.  
XX  
XX 26-MAR-2002; 2002WO-US009187.  
XX  
XX 26-MAR-2001; 2001US-00817879.  
PR 08-JUN-2001; 2001US-00877478.  
PR 08-JUN-2001; 2001US-0296876P.  
PR 24-OCT-2001; 2001US-0335059P.  
PR 05-DEC-2001; 2001US-0337055P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX (BLAT/) BLATT L.  
XX (MACE/) MACEJAK D.  
XX (MCSW/) MCSWIGGEN J.  
XX (MOR/) MORRISSEY D.  
XX (PAVC/) PAVCO P.  
XX (LEEP/) LEE P.

PA (DRAP/) DRAPER K.  
PA (ROBE/) ROBERTS E.  
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
PI Draper K, Roberts E;  
XX WPI; 2003-229207/22.  
XX  
XX Novel compound useful for treating cirrhosis, liver failure,  
PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
PT infection.  
XX  
XX Claim 1; Page 262; 387pp; English.  
XX  
XX The present invention relates to nucleic acid molecules which modulate  
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
CC inozymes, zinzymes, amberyzymes, and G-cleaver ribozymes. Also disclosed  
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
CC DNA. The nucleic acids may be used to modulate the expression of HBV  
CC genes and/or potential therapies directed against HBV, and compounds  
CC that modulate the expression and/or replication of HCV. The compounds and  
CC methods of the invention are useful for the treatment of degenerative and  
CC disease states related to HBV and HCV infection, replication and gene  
CC expression such as cirrhosis, liver failure, and hepatocellular  
CC carcinoma. The present sequence represents a substrate for one of the HCV  
CC DNazyme or minus strand DNazyme sequences disclosed in the present  
CC invention  
XX  
XX Sequence 17 BP; 2 A; 2 C; 11 G; 0 T; 2 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 76.5%; Pred. No. 7.3e+02;  
Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
QY 351 GGGGTCCTGATGGGAGA 367  
DB 1 GGGGUCUGGGGGAGA 17  
RESULT 954  
ACD58066/C  
ID ACD58066 standard; RNA; 17 BP.  
XX  
XX ACD58066;  
AC  
XX 23-SEP-2003 (first entry)  
DT  
XX HCV DNazyme substrate sequence #652.  
DE  
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
KW RNA stability; RNA expression; RNA synthesis; antisense;  
KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;  
KW amberyzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
KW HBV reverse transcriptase; Enhancer I region; viral replication;  
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
KW virucide; antiinflammatory; substrate; ss.  
XX  
XX Hepatitis C virus.  
OS  
XX WO200281494-A1.  
FN  
XX 17-OCT-2002.  
PD  
XX 26-MAR-2002; 2002WO-US009187.  
PF  
XX 26-MAR-2001; 2001US-00817879.  
PR  
XX 08-JUN-2001; 2001US-00877478.  
PR

PR 08-JUN-2001; 2001US-0296876P.  
PR 24-OCT-2001; 2001US-0335059P.  
PR 05-DEC-2001; 2001US-0337055P.  
XX  
XX (RISO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MACE/) MACEJAK D.  
PA (MCSW/) MCSWIGGEN J.  
PA (MORR/) MORRISSEY D.  
PA (PAVC/) PAVCO P.  
PA (LEEP/) LEE P.  
PA (DRAP/) DRAPER K.  
PA (ROBE/) ROBERTS E.  
XX  
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
PI Draper K, Roberts E;  
PI WPI; 2003-229207/22.  
XX  
XX Novel compound useful for treating cirrhosis, liver failure,  
PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
PT infection.  
XX  
XX Claim 1; Page 245; 387pp; English.  
XX  
XX The present invention relates to nucleic acid molecules which modulate  
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
CC inozymes, zinzymes, amberyzymes, and G-cleaver ribozymes. Also disclosed  
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
CC DNA. The nucleic acids may be used to modulate the expression of HBV  
CC genes and/or potential therapies directed against HBV, and compounds  
CC that modulate the expression and/or replication of HCV. The compounds and  
CC methods of the invention are useful for the treatment of degenerative and  
CC disease states related to HBV and HCV infection, replication and gene  
CC expression such as cirrhosis, liver failure, and hepatocellular  
CC carcinoma. The present sequence represents a substrate for one of the HCV  
CC DNazyme or minus strand DNazyme sequences disclosed in the present  
CC invention  
XX  
XX Sequence 17 BP; 2 A; 7 C; 3 G; 0 T; 5 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 7.3e+02;  
Matches 15; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
QY 1432 GCAGAGGATGCCATGAA 1448  
DB 17 GGAGAGGATGCCATGCA 1  
RESULT 955  
ACD58725/C  
ID ACC68725 standard; DNA; 17 BP.  
XX  
XX ACC68725;  
AC  
XX 01-JUL-2003 (first entry)  
DT  
XX Murine oligonucleotide associated with tumour suppression, SEQ ID 5972.  
DE  
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;  
KW tumour suppression; tumour reversion; apoptosis; virus resistance;  
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrenia; ss.  
XX  
XX Mus musculus.  
OS  
XX WO2003025176-A2.  
FN

XX 27-MAR-2003.  
PD  
XX  
XX 17-SEP-2002; 2002WO-IB004210.  
PF  
XX  
XX 17-SEP-2001; 2001FR-00011979.  
PR  
XX  
XX (MOLE-) MOLECULAR ENGINES LAB.  
PA  
XX  
XX Telerman A, Amson R, Tuijnder M;  
PI  
XX  
XX WPI; 2003-333167/31.  
DR  
XX  
XX New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.  
PT  
XX  
XX Disclosure; Page 729; 738pp; French.  
PS  
XX  
XX The present invention relates to murine oligonucleotides (ACC62754-  
CC ACC6806), which are associated with tumour suppression, tumour  
CC reversion, apoptosis and virus resistance. The oligonucleotides are  
CC useful as (1) as probes and primers for detecting, identifying,  
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a  
CC gene chip; in vitro as (anti)sense reagents; and (2) for production of  
CC recombinant polypeptides. The oligonucleotides are useful for preparation  
CC of pharmaceuticals for prevention and/or treatment of viral diseases that  
CC are characterised by development of tumours or cell degeneration,  
CC specifically cancer but also Alzheimer's disease and schizophrenia  
XX  
XX Sequence 17 BP; 2 A; 11 C; 2 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 7.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1466 GTCTGGGGGAGCGGATC 1482  
DB 17 GGCTGGGGGAGCGGATC 1  
RESULT 956  
ACC68431  
ID ACC68431 standard; DNA; 17 BP.  
AC  
XX  
XX ACC68431;  
XX  
XX 01-JUL-2003 (first entry)  
DT  
XX  
XX Murine oligonucleotide associated with tumour suppression, SEQ ID 5678.  
DE  
XX  
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;  
KW tumour suppression; tumour reversion; apoptosis; virus resistance;  
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrenia; ss.  
KW  
XX  
XX Mus musculus.  
OS  
XX  
XX WO2003025176-A2.  
PN  
XX  
XX 27-MAR-2003.  
PD  
XX  
XX 17-SEP-2002; 2002WO-IB004210.  
PF  
XX  
XX 17-SEP-2001; 2001FR-00011979.  
PR  
XX  
XX (MOLE-) MOLECULAR ENGINES LAB.  
PA  
XX  
XX Telerman A, Amson R, Tuijnder M;  
PI  
XX  
XX WPI; 2003-333167/31.  
DR  
XX  
XX New isolated nucleic acid, useful for treating viral diseases associated

PT with tumors and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.  
XX  
XX Disclosure; Page 694; 738pp; French.  
PS  
XX  
XX The present invention relates to murine oligonucleotides (ACC62754-  
CC ACC6806), which are associated with tumour suppression, tumour  
CC reversion, apoptosis and virus resistance. The oligonucleotides are  
CC useful as (1) as probes and primers for detecting, identifying,  
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a  
CC gene chip; in vitro as (anti)sense reagents; and (2) for production of  
CC recombinant polypeptides. The oligonucleotides are useful for preparation  
CC of pharmaceuticals for prevention and/or treatment of viral diseases that  
CC are characterised by development of tumours or cell degeneration,  
CC specifically cancer but also Alzheimer's disease and schizophrenia  
XX  
XX Sequence 17 BP; 5 A; 7 C; 2 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 7.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1479 GATCCACGAACTTCCTG 1495  
DB 1 GATCCCCCAACATCCTG 17  
RESULT 957  
ADB42535  
ID ADB42535 standard; DNA; 17 BP.  
AC  
XX  
XX ADB42535;  
XX  
XX 18-DEC-2003 (revised)  
DT  
XX  
XX 04-DEC-2003 (first entry)  
DT  
XX  
XX Tumour suppression/reversion associated nucleotide #2858.  
DE  
XX  
XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
KW diagnosis.  
KW  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO2003040369-A2.  
PN  
XX  
XX 15-MAY-2003.  
PD  
XX  
XX 17-SEP-2002; 2002WO-IB004219.  
PF  
XX  
XX 17-SEP-2001; 2001FR-00011981.  
PR  
XX  
XX (MOLE-) MOLECULAR ENGINES LAB.  
PA  
XX  
XX Telerman A, Amson R, Tuijnder M;  
PI  
XX  
XX WPI; 2003-441574/41.  
DR  
XX  
XX New nucleic acid encoding human prostate membrane-specific antigen,  
PT useful e.g. for treatment of tumors and viral infection, also related  
PT polypeptide and antibodies.  
PT  
XX  
XX Disclosure; Page 366; 771pp; French.  
PS  
XX  
XX The invention relates to the isolation of 6327 nucleotide sequences,  
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
CC sequence having at least 80% identity, after optimal alignment, with the  
CC nucleotides, a sequence that hybridizes under stringent conditions with  
CC the nucleotides, or the complement, or corresponding RNA, of the  
CC nucleotides. The nucleotides are used as probes or primers for detecting,  
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
CC sense and antisense sequences, of nucleotides involved in tumour

CC suppression or reversion, apoptosis and or viral resistance, to produce  
CC recombinant polypeptides, and to prepare transgenic animals, as  
CC experimental models. The nucleotides (also vectors containing them and  
CC cells containing the vectors), the encoded polypeptides and antibodies  
CC (Ab) against the polypeptide are useful for prevention and/or treatment  
CC of viral infections or diseases characterized by development of tumours  
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
CC Analysis of the expression of the nucleotides can be used for diagnosis  
CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
CC also be used to screen for their specific interactive molecules,  
CC potentially useful for treating diseases associated with abnormal  
CC expression of the nucleotides.

XX  
SQ Sequence 17 BP; 7 A; 2 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 7.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 127 GATCGGATGAGAGAT 143  
|||||  
DB 1 GATCGGAGCAGAGAT 17

RESULT 958  
ADC03574  
ID ADC03574 standard; DNA; 17 BP.  
XX  
AC ADC03574;  
XX  
DT 18-DEC-2003 (first entry)  
XX  
DE Human Na/H exchanger-like protein 1 gene oligonucleotide #21.  
XX  
KW ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;  
XX NHELP1; passive replacement therapy; vaccine; diagnosis.  
XX  
OS Homo sapiens.

XX  
PN EP1273660-A2.  
XX  
PD 08-JAN-2003.

XX  
PF 25-JAN-2002; 2002EP-00001160.  
XX  
PR 30-JAN-2001; 2001WO-US000666.

PR 23-MAY-2001; 2001US-00864761.  
PR 21-DEC-2001; 2001US-0343331P.

XX  
PA (AEOM-) AEOMICA INC.

XX  
PI Gu Y;

XX  
DR WPI; 2003-302724/30.

XX  
PT New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a  
PT passive replacement therapy or as a vaccine for treating or preventing  
PT disorders associated with aberrant expression or activity of human  
PT NHELP1.

XX  
PS Example 2; SEQ ID NO 61; 468pp; English.

XX  
CC The invention relates to a nucleic acid molecule which encodes a Na<sup>+</sup>/H<sup>+</sup>  
CC exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1  
CC polypeptide, an antibody against the protein or its antigen-binding  
CC fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1  
CC polypeptide and an agonist are particularly useful for manufacturing a  
CC medicament for treating or preventing a disorder associated with  
CC decreased expression or activity of human NHELP1. The antibody or its  
CC antigen-binding fragment, and an antagonist, are useful for manufacturing  
CC a medicament for treating or preventing a disorder associated with  
CC increased expression or activity of human NHELP1. The NHELP1 nucleic acid  
CC or protein is useful as passive replacement therapy, as a vaccine, or in

CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide  
CC spanning the sequence of the human NHELP1 gene (ADC03514).

XX  
SQ Sequence 17 BP; 7 A; 4 C; 2 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 7.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1251 TATCTTAGGACCCCA 1267  
|||||  
DB 1 TATCTAGGATCCCA 17

RESULT 959  
AAZ57670/C  
ID AAZ57670 standard; DNA; 18 BP.  
XX  
AC AAZ57670;  
XX  
DT 05-APR-2000 (first entry)  
XX  
DE Human G-alpha-12 antisense inhibitor ISIS# 20658.  
XX  
KW G-alpha-12 inhibitor; antisense compound; cell differentiation; cancer;  
XX cell growth; metastatic growth; ss; ISIS# 20658.  
XX  
OS Homo sapiens.

XX  
PN US5998206-A.  
XX  
PD 07-DEC-1999.

XX  
PF 23-FEB-1999; 99US-00256496.  
XX  
PR 23-FEB-1999; 99US-00256496.

XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Cowsert LM;

XX  
DR WPI; 2000-095920/08.  
XX  
PT Antisense inhibition of human G-alpha-12 expression.

XX  
PS Example 15; Col 38; 36pp; English.

XX  
CC This is a human G-alpha-12 antisense nucleotide sequence. G-alpha-12 is a  
CC member of the G12/13 subfamily of G-proteins. The primary function of G-  
CC alpha-12 is in cell differentiation and growth. The invention relates to  
CC antisense compounds which are 8-30 nucleotides long (see AAZ57668-  
CC 257746). The antisense molecules are targeted to the human G-alpha-12  
CC nucleic acid molecule, and inhibit the expression of G-alpha-12. The  
CC molecules preferably have a modified internucleotide linkage, and at  
CC least one modified sugar moiety. The compounds target different regions  
CC of the human G-alpha-12 RNA. The expression of human G-alpha 12 is  
CC inhibited by contacting human cells or tissues in vitro with the  
CC antisense molecules. The oligonucleotides are used in modulating the  
CC function of nucleic acid molecules encoding G-alpha-12, ultimately  
CC modulating the amount of G-alpha-12 produced. The antisense compounds can  
CC be utilized for diagnostics, therapeutics, prophylaxis and as research  
CC agents and kits. They may be useful in the treatment of cancer, and  
CC metastatic growth.

XX  
SQ Sequence 18 BP; 4 A; 4 C; 9 G; 1 T; 0 U; 0 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 7.8e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 555 CCTCAGCCGCGCTCC 571  
|||||  
DB 18 CCTCAGCCGCTGCCTGC 2



RESULT 960  
 AAQ03964  
 ID AAQ03964 standard; DNA; 18 BP.  
 XX  
 AC AAQ03964;  
 XX  
 DT 22-AUG-1990 (first entry)  
 XX  
 DE Herpes simplex virus replication inhibitor 294.  
 XX  
 KW Herpes simplex virus; HSV; herpes; transactivating protein; TAP; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN EP363059-A.  
 XX  
 PD 11-APR-1990.  
 XX  
 PF 26-SEP-1989; 89EP-00309754.  
 XX  
 PR 30-SEP-1988; 88US-00252225.  
 XX  
 PA (SCHE) SCHERING CORP.  
 XX  
 PI Draper KG;  
 XX  
 DR WPI; 1990-109387/15.  
 XX  
 XX Inhibitor of herpes simplex virus replication - comprising oligomer  
 PT complementary to initiation region of mRNA coding for HSV trans-  
 PT activating protein.  
 XX  
 PS Disclosure; Fig 1; 17pp; English.  
 XX  
 CC Oligomer hybridises to the transactivating protein region of the HSV  
 CC genome blocking successful replication. Useful in prevention and  
 CC treatment of infected cells  
 XX  
 SQ Sequence 18 BP; 4 A; 3 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 18;  
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 505 GAGGCTACTCGAGAA 521  
 Db 1 GTGGGTACTCGAGAA 17  
 RESULT 961  
 AAT11975/C  
 ID AAT11975 standard; DNA; 18 BP.  
 XX  
 AC AAT11975;  
 XX  
 DT 25-MAR-2003 (revised)  
 XX  
 DT 13-MAR-1996 (first entry)  
 XX  
 DE CMV antisense oligonucleotide (ISIS 5479).  
 XX  
 KW antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;  
 KW intermediate early complex; IE1; IE2; DNA polymerase gene; ss.  
 XX  
 OS Synthetic.  
 XX  
 PH Key Location/Qualifiers  
 FT modified\_base 1..18  
 FT /tag= a  
 FT /note= "Phosphorothioate backbone"  
 XX  
 PN US5442049-A.

XX 15-AUG-1995.  
 PD  
 XX 25-JAN-1993; 93US-00009263.  
 PF  
 XX 19-NOV-1992; 92US-00927506.  
 PR  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Baker B, Draper K, Anderson K;  
 PI  
 XX WPI; 1995-292538/38.  
 DR  
 XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to  
 PT a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and  
 PT treatment of CMV diseases.  
 XX  
 PS Example 10; Col 17; 66pp; English.  
 XX  
 CC AAT11971-84 are antisense oligonucleotides (ONS) against human  
 CC cytomegalovirus (CMV) that displayed activities of at least 50 % of  
 CC control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal  
 CC mismatches could be tolerated without loss of antiviral activity.  
 CC Antisense ONS targeting CMV DNA or RNA coding for the IE1, IE2 or DNA  
 CC polymerase proteins have been shown to be effective in therapy,  
 CC prophylaxis and diagnosis of CMV infection. The ONS may be modified to  
 CC reduce nuclease resistance and to increase their efficacy. Modifications  
 CC include phosphorothioate backbones, alkyl and halogen-substituted sugar  
 CC moieties at the 2' position. (Updated on 25-MAR-2003 to correct PF  
 CC field.)  
 XX  
 SQ Sequence 18 BP; 0 A; 5 C; 3 G; 10 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 18;  
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 133 ATGAAGAAGATCAAAACG 149  
 Db 18 AAGAAGAAGAGCAAAACG 2  
 RESULT 962  
 AAT01677/C  
 ID AAT01677 standard; DNA; 18 BP.  
 XX  
 AC AAT01677;  
 XX  
 DT 17-DEC-1995 (first entry)  
 XX  
 DE Peptide nucleic acid targeting CMV IE2 nuc sig 2.  
 XX  
 KW peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;  
 KW antiviral; diagnostic; ss.  
 XX  
 OS Synthetic.  
 XX  
 PH Key Location/Qualifiers  
 FT misc\_feature 1..18  
 FT /tag= a  
 FT /note= "at least one (and preferably all) of the backbone  
 FT subunits are composed of amide units, so that the  
 FT oligomer consists of the nucleobases attached covalently  
 FT to a polyamide backbone"  
 XX  
 PN W09504748-A1.  
 XX  
 PD 16-FEB-1995.  
 XX  
 PF 09-AUG-1994; 94WO-US009039.  
 XX  
 PR 09-AUG-1993; 93US-00104438.  
 XX

PA (ISIS-) ISIS PHARM INC.  
 XX Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowseert LM;  
 XX WPI; 1995-090841/12.  
 XX New peptide nucleic acid oligomers hybridisable to cytomegalovirus or  
 PT papilloma-virus - are stable anti-sense molecules with high affinity for  
 PT single stranded DNA, used for treating infections.  
 XX Claim 2; Page 44; 65pp; English.  
 XX New oligomers are claimed which (A) have at least one peptide nucleic  
 CC acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5'  
 CC untranslated region, intron/exon (I/E) junction or coding sequence of  
 CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or  
 CC hybridisable to the E, E2, E4, E5, E6, E7, I1 or I2 reading frames of a  
 CC papillomavirus. The PNAs can be used to target RNA and single stranded  
 CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence  
 CC they may be used therapeutically for modulating cytomegalovirus and  
 CC papillomavirus processes and also as diagnostics (e.g., as probes for  
 CC specific mRNAs). PNA oligomers have high affinity for complementary  
 CC single stranded DNA. They are also able to form triple helices in which a  
 CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds  
 CC with the resulting double helix or with the first PNA strand. The PNAs  
 CC possess no significant charge and are water soluble, which facilitates  
 CC cellular uptake. Further, since they contain amides of non-biological  
 CC amino acids, they are biostable and resistant to enzymatic degradation by  
 CC proteases. The present sequence targets CMV IE2 nuclear localisation  
 CC signal 2  
 XX Sequence 18 BP; 0 A; 5 C; 3 G; 10 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 13.8; DB 1; Length 18;  
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 133 ATGAGAGAGATCAACG 149  
 DB 18 AAGAAGAGAGCAACG 2  
 RESULT 963  
 AAX73494  
 ID AAX73494 standard; RNA; 18 BP.  
 AC AAX73494;  
 XX 28-JUL-1999 (first entry)  
 DT Mouse flk-1 VEGF receptor hairpin ribozyme substrate #41.  
 DE Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
 KW KDR; hamster ribozyme; hairpin ribozyme; cleavage;  
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
 KW foetal liver kinase 1; ss.  
 OS Mus sp.  
 XX WO9715662-A2.  
 FN 01-MAY-1997.  
 PD 25-OCT-1996; 96WO-US017480.  
 XX 26-OCT-1995; 95US-0005974P.  
 PR 11-JAN-1996; 96US-00584040.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (CHIR) CHIRON CORP.  
 XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

XX WPI; 1997-259017/23.  
 XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
 PT rheumatoid arthritis, etc., in a human patient.  
 XX Claim 4; Page 152; 218pp; English.  
 XX The present invention describes nucleic acid molecules which modulate the  
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more  
 CC receptors of vascular endothelial growth factor (VEGF). A patient  
 CC (preferably human) having a condition associated with the level of the  
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
 CC treated by administering the nucleic acid molecule or the expression  
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples  
 CC of nucleic acid molecules from the present invention  
 XX Sequence 18 BP; 1 A; 6 C; 7 G; 0 T; 4 U; 0 Other;  
 SQ Query Match 0.8%; Score 13.8; DB 1; Length 18;  
 Best Local Similarity 70.6%; Pred. No. 7.8e+02;  
 Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;  
 QY 1033 GACTTTGGCCTCGGCCG 1049  
 DB 1 GACUUCGCGUUGGCCCG 17  
 RESULT 964  
 AAV47637  
 ID AAV47637 standard; DNA; 18 BP.  
 XX AAV47637;  
 XX 25-MAR-2003 (revised)  
 DT 08-DEC-1998 (first entry)  
 XX Primer 1, located in exon 3 and 4 of VEGF-B.  
 DE Primer; amplification; PCR; mouse; VEGF-B; allele; F2 offspring;  
 KW cysteine residue; intramolecular disulphide bond; transgenic animal; ss.  
 OS Synthetic.  
 OS Mus sp.  
 XX WO9836052-A1.  
 XX 20-AUG-1998.  
 PD 18-FEB-1998; 98WO-US003212.  
 XX 18-FEB-1997; 97US-0038202P.  
 PR (LUDW-) LUDWIG INST CANCER RES.  
 PA Von Euler G, Aase K, Betsholtz C, Eriksson U, Pekny M;  
 PI Gebre-Medhin S, Li X;  
 XX WPI; 1998-457107/39.  
 XX Transgenic non-human animals - which contain cells with modified vascular  
 PT endothelial growth factor B gene for use in diagnostic and therapeutic  
 PT studies.  
 XX Example 4; Page 22; 45pp; English.  
 XX Primers AAV47637 and AAV47638 were used to amplify the wildtype VEGF-B  
 CC allele from tail DNA from F2 offspring, and can be located to exon 3 and  
 CC exon 4 of the mouse VEGF-B gene. F2 mice that contain the wild-type  
 CC allele were found to produce an amplified fragment of 316 bp upon PCR



Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 133 ATGAAGAAGATCAACG 149  
Db 18 AAGAGAGAGAGCAACG 2

RESULT 967  
AAZ41129/c  
ID AAZ41129 standard; DNA; 18 BP.  
XX  
XX  
AC AAZ41129;  
XX  
XX  
DT 26-JAN-2000 (first entry)  
XX  
DE Human G-alpha-11 phosphorothioate antisense oligonucleotide #33.

XX Identification; genetic target; gene modulation; human; probe;  
KW antisense oligonucleotide; phosphorothioate; PCR primer;  
KW nucleotide sequence-based technology; antisense drug discovery;  
KW target validation; ss.  
XX  
XX Synthetic.  
OS Homo sapiens.  
OS  
XX W09953101-A1.  
XX  
XX 21-OCT-1999.  
XX  
XX 13-APR-1999; 99WO-US008268.  
XX  
XX 13-APR-1998; 98US-0081483P.  
PR  
XX 28-APR-1998; 98US-00067638.  
XX  
XX (ISIS-) ISIS PHARM INC.

XX Cowsext LM, Baker BF, McNeil J, Freier SM, Sasmor HM, Brooks DG;  
PI Ohasi C, Wyatt JR, Borchers AH, Vickers TA;  
XX WPI; 1999-620446/53.  
XX  
XX Identifying compounds which modulate expression of nucleic acids, used to  
PT provide compounds having defined physical, chemical or bioactive  
PT properties, e.g. antisense activity.  
XX  
XX Example 27; Page 108; 264pp; English.  
XX  
XX A method has been developed of defining a set of compounds that modulate  
CC the expression of a target nucleic acid (tNA) sequence via binding of the  
CC compounds with the tNA sequence. The method comprises generating a  
CC library of virtual compounds in silico according to defined criteria, and  
CC evaluating in silico the binding of the virtual compounds with the tNA  
CC according to defined criteria. Also described are: (1) a method of  
CC defining a set of oligonucleotides (ONs) that modulate the expression of  
CC a tNA sequence via binding of the ONs with the tNA sequence comprising  
CC generating a library of virtual compounds in silico according to defined  
CC criteria, and evaluating in silico the binding of the virtual ONs with  
CC the tNA according to defined criteria; and (2) a method of defining a set  
CC of compounds that modulate the expression of a tNA sequence via binding  
CC of the compounds with the tNA. The methods can be used for the generation  
CC and identification of synthetic compounds having defined physical,  
CC chemical or bioactive properties. Information gathered from assays of  
CC such compounds is used to identify nucleic acid sequences that are  
CC tractable to a variety of nucleotide sequence-based technologies, e.g.  
CC antisense drug discovery and target validation. AAZ40852 to AAZ41220, and  
CC AAY52701 to AAY52706, represent sequences used in the exemplification of  
CC the present invention  
XX  
XX Sequence 18 BP; 2 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 7.8e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 512 ACCTGGAGAGCTGACC 528  
Db 17 ACGTGGAGAGCTGACC 1

RESULT 968  
AAZ31599/c  
ID AAZ31599 standard; DNA; 18 BP.  
XX  
XX  
AC AAZ31599;  
XX  
XX  
DT 13-JAN-2000 (first entry)  
XX  
DE Human IKB-Beta antisense inhibitor ISIS# 23583.

XX Inhibitor-kappa B kinase-beta; IKB-beta; human; T-cell leukaemia; asthma;  
KW inflammatory response; inflammatory disease; juvenile diabetes mellitus;  
KW Graves' disease; rheumatoid arthritis; allograft rejection; diagnosis;  
KW inflammatory bowel disease; multiple sclerosis; contact dermatitis;  
KW rhinitis; allergy; hyperproliferative disorder; tumour; therapy;  
KW antisense inhibitor; ss.

XX Synthetic.  
OS Homo sapiens.  
OS  
XX US5977341-A.  
XX  
XX 02-NOV-1999.  
XX  
XX 20-NOV-1998; 98US-00197008.  
XX  
XX 20-NOV-1998; 98US-00197008.

XX (ISIS-) ISIS PHARM INC.  
XX  
XX Monia BP, Cowsext LM;  
XX WPI; 1999-619715/53.  
XX  
XX Antisense oligonucleotides inhibiting human Inhibitor-kappa B Kinase-  
PT beta, useful for treating conditions such as inflammation, asthma,  
PT diabetes, allograft rejection, allergies, hyperproliferative disorders or  
PT tumors.

XX Claim 11; Col 40; 32pp; English.

XX This sequence represents an antisense oligonucleotide (I) of the  
CC invention. (I) are 8 to 30 nucleotides in length and inhibit the  
CC expression of human inhibitor-kappa B kinase-beta (IKB-beta). (I)  
CC inhibits the expression of human IKB-beta which plays a role in the  
CC development of T-cell leukaemia and in the activation of inflammatory  
CC responses. (I) is therefore useful for treating inflammatory diseases or  
CC disorders with an inflammatory component such as asthma, juvenile  
CC diabetes mellitus, Graves' disease, rheumatoid arthritis, allograft  
CC rejection, inflammatory bowel disease, multiple sclerosis, contact  
CC dermatitis, rhinitis and various allergies, or hyperproliferative  
CC disorders such as leukaemias and other tumours. (I) may also be used for  
CC detection of the above disorders

XX Sequence 18 BP; 5 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 7.8e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 831 CACCCCTGCTTTGAGT 847  
Db 17 CACCCCTGCTTTGAGT 1

RESULT 969  
AAZ56422

```

ID AAX56422 standard; DNA; 18 BP.
XX AC AAX56422;
XX DT 22-JUL-1999 (first entry)
XX DE Human Herg-3 PCR primer SEQ ID NO:10.
XX KW Human; erg subfamily; potassium ion channel protein; Herg-2; Herg-3;
XX KW cardiac arrhythmia; long Q-T syndrome; PCR primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO9920760-A2.
XX PD 29-APR-1999.
XX PF 21-OCT-1998; 98WO-US022286.
XX PR 22-OCT-1997; 97US-00956242.
XX PA (WISC ) WISCONSIN ALUMNI RES FOUND.
XX PI Ganetzky BS, Titus SA;
XX PI WPI; 1999-326594/27.
XX PT Novel ion channel genes and proteins useful for identifying homologues
XX PT and screening for therapeutics.
XX PS Example; Page 15; 46pp; English.
XX CC The present sequence represents a PCR primer for Herg-3, a human erg
XX CC subfamily of potassium ion channel protein. The erg genes encode
XX CC potassium ion channel proteins. These proteins are implicated in the
XX CC development of long Q-T syndrome, a rare, but often fatal, cardiac
XX CC arrhythmia. The Herg-2 and -3 proteins can be used to identify modulators
XX CC of the proteins, useful in therapeutics. The nucleic acids can be used
XX CC for screening of homologues
XX SQ Sequence 18 BP; 0 A; 6 C; 6 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. NO. 7.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 930 GCTGCTCCGTGGCTGG 946
DB 2 GCTGCTCCGTGGCTTG 18
RESULT 970
AAZ19500/C
ID AAZ19500 standard; DNA; 18 BP.
XX AC AAZ19500;
XX DT 15-NOV-1999 (first entry)
XX DE Human G-alpha-11 phosphorothioate antisense oligonucleotide SEQ ID NO:40.
XX KW Human; G-alpha-11; antisense oligonucleotide; inhibition; expression;
XX KW phosphorothioate; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN US5951455-A.
XX PD 14-SEP-1999.
XX PF 04-DEC-1998; 98US-00205922.
XX PR 04-DEC-1998; 98US-00205922.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Cowseert LM;
XX PI WPI; 1999-539140/45.
XX PT Inhibitory antisense compounds useful for the treatment of diseases
XX PT associated with G-alpha-11.
XX PS Claim 3; Col 40; 38pp; English.
XX CC The present invention describes inhibitory antisense compounds of 8-30
XX CC nucleotides, targeted to a nucleic acid molecule encoding human G-alpha-
XX CC 11. AAZ19468 to AAZ19547 represent human G-alpha-11 phosphorothioate
XX CC antisense oligonucleotides given in the present invention. The
XX CC oligonucleotides may be useful for the treatment of diseases associated
XX CC with G-alpha-11
XX SQ Sequence 18 BP; 2 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. NO. 7.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 512 ACCTGGAGAGCTGACC 528
DB 17 ACCTGGAGAGCTGACC 1
RESULT 971
AAA74957
ID AAA74957 standard; DNA; 18 BP.
XX AC AAA74957;
XX DT 02-JAN-2001 (first entry)
XX DE PCR primer used to amplify a 316 bp fragment of murine VEGF-B gene.
XX KW VEGF-B; vascular endothelial growth factor-B; heart abnormality;
XX KW ischemia; atrioventricular conduction defect; myocardium; heart disease;
XX KW PCR primer; ss.
XX OS Mus sp.
XX PN WO200052462-A1.
XX PD 08-SEP-2000.
XX PF 03-MAR-2000; 2000WO-US005465.
XX PR 03-MAR-1999; 99US-0160083P.
XX PA (LUDW-) LUDWIG INST CANCER RES.
XX PI Aase K, Thoren P, Eriksson U;
XX PI WPI; 2000-638114/61.
XX PT Use of vascular endothelial growth factor B deficient animals for
XX PT screening atrioventricular conduction or ischemia modulating compounds,
XX PT and characterization of the biological roles of the growth factor.
XX PS Example 4; Page 31; 58pp; English.
XX CC PCR primers AAA74956-57 were used to amplify a 316 bp fragment from exons
XX CC 3 and 4 of the VEGF (vascular endothelial growth factor)-B. The primers
XX CC were used to analyse VEGF-B deficient transgenic mice. VEGF-B deficient
XX CC animals show heart abnormalities that appear to be caused by
XX CC atrioventricular conduction defects and ischemia of the myocardium. The

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CC specification describes methods for screening a compound for  
 CC atrioventricular conduction or ischemia modulating activity. The method  
 CC comprises introducing the compound into a VEGF-B deficient non-human  
 CC animal, and assaying the effect on atrioventricular conduction or  
 CC ischemia. The methods are used for screening atrioventricular conduction  
 CC or ischemia modulating compounds, treatment or alleviation of these  
 CC conditions, diagnosis of heart disease characterized by loss of VEGF-B  
 CC expression, and detecting or diagnosing VEGF-B deficiency in heart of a  
 CC test subject

SQ Sequence 18 BP; 2 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;  
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 47 GACGACGAGTGTGACTG 63  
 Db 1 GCCCAGCTGTGTGACTG 17

RESULT 972  
 AAA09733/C  
 ID AAA09733 standard; DNA; 18 BP.

XX AAA09733;

DT 23-JUN-2000 (first entry)

DE G-alpha-12 antisense inhibitor oligonucleotide #33 (ISIS #25844).

XX G-alpha-12; antisense inhibitor; infection; inflammation; prevent;  
 KW tumour formation; treatment; inhibit; ss.

XX Homo sapiens.

XX US6040179-A.

XX 21-MAR-2000.

XX 25-JUN-1999; 99US-00339993.

PR 25-JUN-1999; 99US-00339993.

PA (ISIS-) ISIS PHARM INC.

PI Cowser LM;

DR WPI; 2000-270140/23.

XX Novel antisense oligonucleotide containing compounds, useful for  
 PT inhibiting the expression of G-alpha-12 in human cells and tissues and  
 PT treating infection, inflammation and cancer.

PS Claim 1; Col 41; 31pp; English.

XX This sequence represents an antisense oligonucleotide sequence targeted  
 CC to a nucleotide sequence encoding human G-alpha-12. G-alpha-12 is a  
 CC member of the Gi subfamily of G proteins, which is involved in hormonal  
 CC inhibition of adenylyl cyclase and in the regulation of plasma membrane  
 CC enzymes. The expression of G-alpha-12 has been shown to be altered in  
 CC some tumours. Mice lacking the G-alpha-12 gene display growth retardation  
 CC and develop adenocarcinoma of the colon and a form of lethal diffuse  
 CC colitis similar to ulcerative colitis in humans. The antisense molecules  
 CC are useful for inhibiting the expression of G-alpha-12 in human cells or  
 CC tissues, and for treating and preventing various disorders such as  
 CC infection, inflammation and tumour formation. The antisense  
 CC oligonucleotides are also useful for research and diagnostic purposes

XX Sequence 18 BP; 3 A; 9 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;  
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1636 AGGCAGCGCTGGAGGG 1652  
 Db 17 AGGCTGGCTGTGAGGG 1

RESULT 973

AAA86683  
 ID AAA86683 standard; DNA; 18 BP.

XX AAA86683;

DT 04-DEC-2000 (first entry)

DE Cdc 2 kinase hammerhead ribozyme recognition site #114.

XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
 KW Mammalia.

XX WO200032765-A2.

XX 08-JUN-2000.

XX 06-DEC-1999; 99WO-US028772.

PR 04-DEC-1998; 98US-0110954P.

XX (IMMU-) IMMUSOL INC.

XX Tritz R, Welch PJ, Barber JR, Robbins JM;

XX WPI; 2000-412314/35.

XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
 PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
 PT PCNA and Cyclin B1.

PS Example 1; Page 21; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme,  
 CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
 CC Representative examples of ribozyme recognition sites are given in  
 CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
 CC inhibiting restenosis by introduction of the ribozyme into cells. The  
 CC ribozyme is resistant to endonuclease activity and hence is efficient in  
 CC restenosis treatment

XX Sequence 18 BP; 2 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;  
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1036 TTTGGCTGCGCCGAGC 1052

Db 1 TTTGGCTTCCGAGAGC 17

RESULT 974

AAZ57669/C  
 ID AAZ57669 standard; DNA; 18 BP.

XX AAZ57669;

AC AAZ57669;

DT 05-APR-2000 (first entry)

DE Human G-alpha-12 antisense inhibitor ISIS# 20657.

XX G-alpha-12 inhibitor; antisense compound; cell differentiation; cancer;

KW cell growth; metastatic growth; ss; ISIS# 20657.

XX OS Homo sapiens.  
 XX PN US998206-A.  
 XX PD 07-DEC-1999.  
 XX PF 23-FEB-1999; 99US-00256496.  
 XX PR 23-FEB-1999; 99US-00256496.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Cowser LM;  
 XX WPI; 2000-095920/08.  
 XX PT Antisense inhibition of human G-alpha-12 expression.  
 XX PS Example 15; Col 38; 36pp; English.  
 XX CC This is a human G-alpha-12 antisense nucleotide sequence. G-alpha-12 is a member of the G12/13 subfamily of G-proteins. The primary function of G-alpha-12 is in cell differentiation and growth. The invention relates to antisense compounds which are 8-30 nucleotides long (see AAZ57668-257746). The antisense molecules are targeted to the human G-alpha-12 nucleic acid molecule, and inhibit the expression of G-alpha-12. The molecules preferably have a modified internucleotide linkage, and at least one modified sugar moiety. The compounds target different regions of the human G-alpha-12 RNA. The expression of human G-alpha 12 is inhibited by contacting human cells or tissues in vitro with the antisense molecules. The oligonucleotides are used in modulating the function of nucleic acid molecules encoding G-alpha-12, ultimately modulating the amount of G-alpha-12 produced. The antisense compounds can be utilized for diagnostics, therapeutics, prophylaxis and as research agents and kits. They may be useful in the treatment of cancer, and metastatic growth  
 XX CC Sequence 18 BP; 2 A; 5 C; 9 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 13.8; DB 1; Length 18;  
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 552 GCCCTTCAGCCGCGCC 568  
 DB 17 GACCTTCAGCCGCGCC 1  
 RESULT 975  
 AAZ56415  
 ID AAZ56415 standard; DNA; 18 BP.  
 AC AAZ56415;  
 XX  
 DT 17-MAR-2000 (first entry)  
 XX  
 DE Escherichia coli H7 specific fliC oligonucleotide primer #1696.  
 XX  
 KW Flagellin; fliC; antigen; detection; PCR primer; ss.  
 XX  
 OS Escherichia coli.  
 XX  
 PN WO9961458-A1.  
 PD 02-DEC-1999.  
 XX  
 PF 21-MAY-1999; 99WO-AU000385.  
 XX  
 PR 21-MAY-1998; 98AU-00003634.  
 XX  
 PA (UNSY ) UNIV SYDNEY.  
 XX

PI Reeves PR, Wang L;  
 XX WPI; 2000-072598/06.  
 XX  
 PT Novel nucleic acid molecule useful for the detection of flagellated bacterial strains in food, feces, etc.  
 PT  
 XX  
 PS Disclosure; Page 43; 245pp; English.  
 XX  
 CC AAZ56331 to AAZ56398 represent nucleic acid molecules (I) encoding all or part of an Escherichia coli flagellin protein except a protein expressed by E. coli H1, H7, H12 or H48 type strains. The present invention also describes a method of detecting the presence of E. coli of a particular H serotype in a sample, comprising specifically hybridising a nucleic acid, preferably at least a pair, derived from a flagellating gene, specific for a particular flagellin gene associated with the H serotype, to any E. coli in the sample which contain the gene, and detecting any hybridised molecules, identifying the presence of that serotype in the sample. (I) are useful for: (1) detecting the presence of E. coli of H serotype in a sample by hybridising at least one or a pair of (I) to any E. coli in the sample and detecting the hybridised nucleic acid molecules; and (2) for detecting the presence of both O and H-serotypes of E. coli by hybridising at least one or a pair of (I) to any E. coli present in the sample and detecting the hybridised nucleic acid molecules. (I) is particularly useful for detecting the combination of O and H antigen. Hybridised (I) when using at least one (I) is detected by southern blot analysis and, when using a pair of (I), is detected by polymerase chain reaction (PCR). AAZ56399 to AAZ56420 represent primers used in the exemplification of the present invention  
 XX CC Sequence 18 BP; 2 A; 7 C; 7 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.8%; Score 13.8; DB 1; Length 18;  
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1566 GCCTGACTCAGCGCGCC 1582  
 DB 2 GCCTGACTCAGCGCGCC 18  
 RESULT 976  
 AAC60641/c  
 ID AAC60641 standard; DNA; 18 BP.  
 AC AAC60641;  
 XX  
 DT 01-FEB-2001 (first entry)  
 XX  
 DE Human PDK-1 antisense oligonucleotide ISIS #29246.  
 XX  
 KW Human; PDK-1; 3-phosphoinositide dependent protein kinase-1; antisense oligonucleotide; phosphorothioate; antiinflammatory; cytostatic; antimicrobial; ss.  
 KW  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN US6124272-A.  
 XX  
 PD 26-SEP-2000.  
 XX  
 PF 09-APR-1999; 99US-00289466.  
 XX  
 PR 09-APR-1999; 99US-00289466.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Monia BP, Cowser LM;  
 XX  
 DR WPI; 2000-611015/58.  
 XX  
 PT Novel antisense compounds useful for inhibiting the expression of human 3

PT -Phosphoinositide dependent protein kinase-1, useful e.g. for treating  
XX inflammation, tumors and infections.

PS Claim 3; Col 39; 41pp; English.

XX The present sequence is one of a large number of antisense  
CC oligonucleotides which are targeted to a nucleic acid molecule encoding  
CC human 3-phosphoinositide dependent protein kinase-1 (PDK-1). The  
CC antisense compounds may be oligodeoxynucleotides or chimeric  
CC oligonucleotides containing a central gap region, consisting of ten 2'-  
CC deoxynucleotides, which is flanked on both sides by 2'-methoxyethyl (2'-  
CC MOE) wings. The oligonucleotides have a phosphorothioate backbone. The  
CC antisense oligonucleotides are useful for inhibiting the expression of  
CC human PDK-1 in human cells or tissues. They are also useful for  
CC preventing or delaying infection, inflammation or tumors and are useful  
CC for research and diagnostics

XX SQ Sequence 18 BP; 3 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;  
XX Best Local Similarity 88.2%; Pred. No. 7.8e+02;  
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 812 TCACACGGAGAGTCC 828  
DB 17 TGCTCAGGAGAGTCC 1

RESULT 977

AAF56289/C

ID AAF56289 standard; DNA; 18 BP.

XX AC AAF56289;

XX 18-APR-2001 (first entry)

XX Primer #4.

XX Parthenocarp; plant; DefH9-iaaM; rolA; regulation; ss.

XX Synthetic.

XX WO200105985-A1.

XX 25-JAN-2001.

XX 13-JUL-2000; 2000WO-IT000290.

XX 16-JUL-1999; 99IT-RM0000451.

XX (GINE-) GINESTRA SCARL.

XX (SPER-) IST SPERIMENTALE ORTICOLTURA.

XX (CNR) CONSIGLIO NAZ DELLE RICERCHE.

XX Spena A, Rotino G, Ficcacanti N, Defez R;

XX WPI; 2001-147350/15.

XX Use of DNA fragment of specified length to modulate the expression of

XX genes that induce the parthenocarpic trait in plants, by inserting the

XX DNA fragment at the 5' end transcribed untranslated region of the gene.

XX Disclosure; Page 11; 29pp; English.

XX The present invention relates to use of a DNA fragment comprising a

XX sequence of 86 nucleotides fully defined in the specification, or its

XX functional analogs, for regulating the expression of a gene that induces

XX parthenocarp in a plant, by inserting the fragment at the 5' end

XX transcribed untranslated region of the gene. The invention is useful for

XX transgenic plant production which do not show any malformations caused by

XX the use of Gene DefH9-iaaM in some species and cultivars, and for

XX regulating the gene that induces parthenocarp in a plant

XX

SQ Sequence 18 BP; 3 A; 10 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;

XX Best Local Similarity 88.2%; Pred. No. 7.8e+02;

XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1592 GCGTGGTGACACCGAG 1608

DB 17 GTGTGGTGACACCGAG 1

RESULT 978

AAF56287/C

ID AAF56287 standard; DNA; 18 BP.

XX AC AAF56287;

XX 18-APR-2001 (first entry)

XX Primer #2.

XX Parthenocarp; plant; DefH9-iaaM; rolA; regulation; ss.

XX Synthetic.

XX WO200105985-A1.

XX 25-JAN-2001.

XX 13-JUL-2000; 2000WO-IT000290.

XX 16-JUL-1999; 99IT-RM0000451.

XX (GINE-) GINESTRA SCARL.

XX (SPER-) IST SPERIMENTALE ORTICOLTURA.

XX (CNR) CONSIGLIO NAZ DELLE RICERCHE.

XX Spena A, Rotino G, Ficcacanti N, Defez R;

XX WPI; 2001-147350/15.

XX Use of DNA fragment of specified length to modulate the expression of

XX genes that induce the parthenocarpic trait in plants, by inserting the

XX DNA fragment at the 5' end transcribed untranslated region of the gene.

XX Disclosure; Page 11; 29pp; English.

XX The present invention relates to use of a DNA fragment comprising a

XX sequence of 86 nucleotides fully defined in the specification, or its

XX functional analogs, for regulating the expression of a gene that induces

XX parthenocarp in a plant, by inserting the fragment at the 5' end

XX transcribed untranslated region of the gene. The invention is useful for

XX transgenic plant production which do not show any malformations caused by

XX the use of Gene DefH9-iaaM in some species and cultivars, and for

XX regulating the gene that induces parthenocarp in a plant

XX

Query Match 0.8%; Score 13.8; DB 1; Length 18;

XX Best Local Similarity 88.2%; Pred. No. 7.8e+02;

XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1592 GCGTGGTGACACCGAG 1608

DB 17 GTGTGGTGACACCGAG 1

RESULT 979

AAS09667

ID AAS09667 standard; DNA; 18 BP.

XX AC AAS09667;

XX





PR 16-AUG-2000; 2000US-00639667.  
PR 16-AUG-2000; 2000US-00640198.  
PA (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.  
XX Russell SJ, Morris J, Peng K;  
XX P-PSDB; AAB73917.  
DR WPI; 2001-257548/26.  
XX P-PSDB; AAB73917.

XX Monitoring transgene expression and therapeutic peptide production in  
PT mammals by detecting marker polypeptides linked to transgenes or  
PT therapeutic genes released from cells into extracellular body fluid.  
XX  
XX Example 11; Page 48; 79pp; English.

XX The present sequence is a self-cleaving linker. It may be used in a  
CC method for monitoring expression and/or localisation of a transgene, and  
CC production of therapeutic peptide in a mammal. The method involves  
CC quantifying or detecting the amount of marker polypeptide and/or sodium  
CC iodide symporter (NIS) linked to the product of the transgene or  
CC therapeutic gene released from cells into extracellular body fluid, or  
CC determining the location of labelled molecules which are transported into  
CC the cells bearing the marker peptide. The method provides convenient and  
CC effective monitoring of the level and kinetics of expression of  
CC transgenes and the tissue-specific distribution of expressed transgenes  
CC in cells, tissues, animals or humans without the need for disruptive and  
CC expensive sampling methods including surgery. The transgene location can  
CC be monitored without adversely affecting the mammal or the cell. The NIS  
CC is a self protein and as such does not stimulate a host immune reaction.  
CC Furthermore, the NIS functions solely to sequester iodine into a cell,  
CC which does not adversely affect normal cellular function or overall cell  
CC biology

XX Sequence 18 BP; 3 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 7.8e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1723 CATGTTCACTGCGCCAC 1739  
|||||  
Db 1 CATGTTCACTGCGCTAC 17

RESULT 982  
AAH61849  
ID AAH61849 standard; DNA; 18 BP.  
XX  
XX AAH61849;

XX 10-SEP-2001 (first entry)  
XX Cdc 2 kinase hammerhead ribozyme recognition site SEQ ID NO:4273.

XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
KW recognition site; target; ribozyme binding site; eye disease; vulnery;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell-cycle dependent kinase; scarring; MMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytosolic;  
KW aniprositic; dermatological; antiseborrheic; antidiabetic; virucide;  
KW antisticking; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.

XX Homo sapiens.  
OS Synthetic.

XX WO200130362-A2.

XX 03-MAY-2001.

PF 26-OCT-2000; 2000WO-US029500.  
XX  
PR 26-OCT-1999; 99US-0161532P.  
XX  
PA (IMMU-) IMMUSOL INC.  
XX Robbins JM, Tritz R;  
XX WPI; 2001-300427/31.  
DR

XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
PT that cleave RNA encoding cytokines involved in inflammation, matrix  
PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
XX  
XX Disclosure; Page 385; 408pp; English.

XX The present invention describes a method for treating a proliferative  
CC skin or eye disease and scarring. The method involves administering a  
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
CC dependent kinase, growth factor or a reductase, or administering a  
CC nucleic acid molecule (II) comprising a promoter operably linked to a  
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisticking,  
CC ophthalmological, vulnery, keratolytic and virucide activities, and  
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic  
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH577 to AAH52099 represent sequences used in the  
CC exemplification of the present invention

XX Sequence 18 BP; 2 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 7.8e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1036 TTGGCCTGCGCCGAGC 1052  
|||||  
Db 1 TTGGCCTGCGCAGAGC 17

RESULT 983  
ABA03355  
ID ABA03355 standard; DNA; 18 BP.  
XX  
XX ABA03355;

XX 12-FEB-2002 (first entry)  
XX Human clone WA15\_li coding sequence probe.

XX Human; clone WA15\_li; nutrition; cytokine; cell proliferation; probe;  
KW immunomodulatory; cell differentiation; haematopoiesis; tissue growth;  
KW chemotactic; chemokine; thrombolytic; antiinflammatory; cancer;  
KW cytosolic; virucide; antibacterial; fungicide; haematological;  
KW vulnery; contraceptive; antiinfertility; haemostatic;  
KW tumour inhibition; ss.

XX Homo sapiens.

XX WO200175074-A1.

XX 11-OCT-2001.

XX 30-MAR-2001; 2001WO-US010246.

XX 31-MAR-2000; 2000US-0193769P.

XX PA (GEM) GENETICS INST INC.

XX PI Jacobs K, McCoy JM, Lavallie ER, Collins-Racie LA, Evans C;

XX PI Merberg D, Treacy M;

XX WPI; 2001-639364/73.

XX New human protein related to the ribonuclease HI large subunit, useful

XX for treating, e.g. cancer or inflammation.

XX PS Disclosure; Page 65; 67pp; English.

XX The present invention provides the protein and coding sequences of human

XX WA15.11. These sequences can be used in nutritional supplements, they may

XX have cytokine, cell differentiation, cell proliferation,

XX immunomodulatory, anti-inflammatory, haematopoiesis regulating, tissue

XX growth, chemotactic, chemokinetic, haemostatic, thrombolytic, tumour

XX suppression, and tumour inhibition activities, and they may also be used

XX in the treatment of infections, infertility, and cognitive and depressive

XX disorders. The present sequence is a probe used to isolate the coding

XX sequence of the invention

XX SQ Sequence 18 BP; 6 A; 3 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 7.8e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 627 GGACAACTGGCGGAGG 643

DB 2 GGACAACTGGCGGAGG 18

RESULT 984

AAI68749

ID AAI68749 standard; DNA; 18 BP.

XX AAI68749;

XX 21-JAN-2002 (first entry)

XX Human cystatin C derived primer 2.

XX Primer; cystatin C; post-operative insertion; bone tumor; vulnery;

XX transforming growth factor superfamily; osteopathic; gene therapy;

XX bone regeneration; cancer; ss.

XX Homo sapiens.

XX DE10020125-A1.

XX 25-OCT-2001.

XX 18-APR-2000; 2000DE-01020125.

XX 18-APR-2000; 2000DE-01020125.

XX (UYJE ) UNIV SCHILLER JENA.

XX Wiederanders B, Maubach G;

XX WPI; 2002-018650/03.

XX Agent for stimulating bone regrowth, useful as insert after surgery for

XX bone cancer, comprises single sequence expressing a fusion of growth

XX factor and protease inhibitor.

XX Claim 8; Fig 3; 8pp; German.

XX This invention describes a novel agent (A) for post-operative insertion,

XX after removal of bone tumor, comprising a nucleic acid (NAI) encoding a

XX growth factor, especially of the transforming growth factor superfamily,

CC linked by an oligonucleotide (ON) to a sequence (NA2) encoding a protease

CC inhibitor (PI). The product of the invention has osteopathic and

CC vulnery activity and can be used for gene therapy. (A) are used to

CC promote regeneration of bone after surgical removal of primary or

CC metastatic bone cancers. (A) make it possible to use less extensive

CC surgery (removal of less bone), since it reduces the risk of new

CC metastases arising from the borders of the resected zone. It also

CC improves growth of bone into prostheses, resulting in shorter recovery

CC times and stronger incorporation of the prosthesis, and reduces the need

CC for further surgery. This sequence represents a PCR primer used in the

CC amplification of the cystatin C gene used to illustrate the method of the

XX invention

XX SQ Sequence 18 BP; 1 A; 3 C; 11 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 7.8e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 229 AGTGGTGGTGGTGGCGG 245

DB 1 AGCGTGGCGGTGGCGG 17

RESULT 985

ABK14145

ID ABK14145 standard; DNA; 18 BP.

XX ABK14145;

XX 08-MAY-2002 (first entry)

XX Chlorinated ethylene-decomposing bacteria detection DNA KWI-De3.

XX Chlorinated ethylene-decomposing bacteria; 16S rRNA; 16S rDNA; ss; probe;

XX PCR; primer; soil; underground water; chlorinated ethylene; KWI-De3;

XX chlorinated ethane; Dehalococoides.

XX Synthetic.

XX EP1176216-A2.

XX 30-JAN-2002.

XX 23-JUL-2001; 2001EP-00117844.

XX 24-JUL-2000; 2000JP-00227580.

XX 09-MAR-2001; 2001JP-00066001.

XX (KURK ) KURITA WATER IND LTD.

XX Nakamura K, Ueno T;

XX WPI; 2002-173127/23.

XX New nucleic acid for detecting chlorinated ethylene-decomposing bacteria

XX used to purify soil or underground water contaminated with chlorinated

XX ethylene or ethane.

XX Claim 1; Page 7; 22pp; English.

XX The invention relates to a nucleic acid which hybridises to the 16S

XX ribosomal (deoxy)ribonucleic acid of chlorinated ethylene-decomposing

XX bacteria. The nucleic acid can be used as a labelled probe for detecting

XX chlorinated ethylene-decomposing bacteria (e.g. Dehalococoides)

XX comprising the novel nucleic acid by DNA hybridisation using the labelled

XX probe as an indicator. The bacteria can also be detected by performing

XX PCR using the nucleic acid as a primer and the sample nucleic acid as a

XX template, and detecting newly synthesised DNA. A method for decomposing

XX chlorinated ethylene or ethane comprises detecting chlorinated ethylene-

XX decomposing bacteria using underground water or soil as a sample, and

XX introducing the water/soil containing the bacteria, to soil or

XX underground water contaminated by chlorinated ethylene or ethane. The

CC methods are therefore useful for purifying soil or underground water  
 CC contaminated with chlorinated ethylene or ethane. This sequence  
 CC represents a nucleic acid which hybridises to nucleic acid of chlorinated  
 CC ethylene-decomposing bacteria

XX Sequence 18 BP; 5 A; 3 C; 7 G; 3 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 18;  
 Best Local Similarity 88.2%; Pred. No. 7.8e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 596 GCTTGGGAACTGGAG 612  
 ||||| ||||| ||||| |||||  
 Db 1 GCTTGGGAACTGAAG 17

## RESULT 986

ABS64463

ID ABS64463 standard; DNA; 18 BP.

AC ABS64463;

XX ABS64463;

XX 15-NOV-2002 (first entry)

DT 15-NOV-2002 (first entry)

DE Human TGF-beta binding PCR primer SR1 #2.

XX Human; NOVX; neurodegenerative disease; Alzheimer's disease; anxiety;  
 KW Parkinson's disease; Huntington's disease; neurological disorder;  
 KW schizophrenia; manic depression; mental retardation; angina pectoris;  
 KW cardiovascular disease; acute heart failure; myocardial infarction;  
 KW muscular disease; muscular disorder; retinal disease; photoreception;  
 KW deafness; keratinisation disorder; cancer; ovarian cancer; melanoma;  
 KW immunological disorder; inflammatory disease; immune disease; diabetes;  
 KW bacterial infection; fungal infection; protozoal infection; obesity;  
 KW viral infection; reproductive system disorder; metabolic disturbance;  
 KW anorexia; wasting disorder; chronic disease; infectious disease;  
 KW dyslipidaemia; TGF-beta binding; cloning; PCR; primer; ss.

XX Homo sapiens.

OS WO200264791-A2.  
 FN 22-AUG-2002.

PD 10-DEC-2001; 2001WO-US048369.

PF 08-DEC-2000; 2000US-0254329P.

PR 14-DEC-2000; 2000US-0255648P.

PR 15-MAY-2001; 2001US-0291037P.

PR 08-JUN-2001; 2001US-0297173P.

PR 08-JUN-2001; 2001US-0309258P.

PR 29-AUG-2001; 2001US-0315639P.

PR 01-OCT-2001; 2001US-0326393P.

XX (CURA-) CURAGEN CORP.

XX Alcobrook JP, Anderson DW, Burgess CE, Boldog FL, Casman SJ;  
 PI Colman SD, Edinger SR, Ellerman X, Gerlach V, Gorman L, Grosse WM;  
 PI Guo X, Herrmann JL, Kekuda R, Lepley DM, Li L, Macdougall JR;  
 PI Millet I, Pena CE, Peyman JA, Rastelli L, Rieger DK, Shimkets RA;  
 PI Smithson G, Spytek KA, Stone DU, Tchernev VT, Vernet CAM, Voss EZ;  
 PI Zerhusen BD, Zhong H, Zhong M;  
 XX WPI; 2002-643486/69.

XX New NOVX polypeptides and polynucleotides useful for treating or  
 PT preventing e.g. neurodegenerative diseases, neurological disorders,  
 PT cardiovascular diseases, muscular diseases and disorders, or  
 PT immunological diseases.

PS Example 3; Page 288; 299pp; English.

XX The present invention relates to new NOVX polypeptides. The polypeptides,

CC polynucleotides and antibodies are useful in the manufacture of a  
 CC medicament for treating or preventing neurodegenerative diseases (e.g.  
 CC Alzheimer's disease, Parkinson's disease, or Huntington's disease),  
 CC neurological disorders (e.g. anxiety, schizophrenia, manic depression or  
 CC mental retardation), cardiovascular disease (e.g. acute heart failure,  
 CC angina pectoris or myocardial infarction), muscular diseases and  
 CC disorders, retinal diseases (including those involving photoreception,  
 CC deafness and keratinisation disorders), cancer (e.g. ovarian cancer or  
 CC melanoma), immunological disorders, inflammatory and immune diseases,  
 CC bacterial, fungal, protozoal and viral infections, and reproductive  
 CC system disorders. The proteins of the invention may be used to screen  
 CC drugs or compounds that modulate the NOVX protein activity or expression,  
 CC as well as to treat disorders characterised by insufficient or excessive  
 CC production of NOVX protein or protein forms that have decreased or  
 CC aberrant activity compared to NOVX wild type protein, such as diabetes,  
 CC obesity, metabolic disturbances associated with obesity, anorexia and  
 CC wasting disorders associated with chronic diseases and various cancers,  
 CC infectious diseases and various dyslipidaemias. The nucleic acid  
 CC sequences of the invention may be used in chromosome mapping, identifying  
 CC an individual from minute biological samples (tissue typing), and in  
 CC forensic identification of a biological sample. The present nucleic acid  
 CC sequence represents a cloning PCR primer that was used in the methods of  
 CC the invention for amplification of the NOVX TGF-beta binding gene

XX Sequence 18 BP; 1 A; 10 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 7.8e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 555 CCTCAGCCGCCCTCC 571

Db 1 CCTCAGCGTCCGCTCC 17

## RESULT 987

ACD66643/C

ID ACD66643 standard; DNA; 18 BP.

XX ACD66643;

XX 16-SBP-2003 (first entry)

DT Human Inhibitor-kappa B kinase-beta antisense oligonucleotide #12.

DE Human; inhibitor-kappa B kinase-beta; anorectic; antidiabetic;  
 KW antiinflammatory; cytostatic; gene therapy; antisense compound; obesity;  
 KW diabetes type II; inflammatory disorder; cancer; leukaemia;  
 KW antisense oligonucleotide; ss.

XX Homo sapiens.

XX US2003050270-A1.

XX 13-MAR-2003.

XX 24-MAY-2002; 2002US-00156610.

XX 20-NOV-1998; 98US-00197008.

XX 28-JUL-1999; 99WO-US016952.

XX 30-AUG-2001; 2001US-00856246.

XX (MONI/) MONIA B P.

XX (COWS/) COWSERT L M.

XX (KOLL/) KOLLER E.

XX Monia BP, Cowsert LM, Koller E;

XX WPI; 2003-512357/48.

XX New antisense compound, useful for preparing a composition for treating

XX obesity, diabetes type II, inflammatory disorder or cancer e.g.,

XX leukemia.

XX Claim 3; Page 22; 49pp; English.  
XX The invention describes a new antisense compound, which is 8-30  
CC nucleobases in length targeted to a nucleic acid molecule encoding  
CC inhibitor-kappa B Kinase-beta that specifically hybridises with and  
CC inhibits the expression of inhibitor-kappa B Kinase-beta. The compound is  
CC useful for preparing a composition for treating obesity, diabetes type  
CC II, inflammatory disorder or cancer e.g., leukaemia. This sequence  
CC represents an antisense oligonucleotide used to inhibit the expression  
CC of inhibitor-kappa B Kinase-beta  
XX  
SQ Sequence 18 BP; 5 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 7.8e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 831 CACCCCTGTCTTGACT 847  
Db 17 CACCCCTGGCCTTGAGT 1  
  
RESULT 988  
ADEI4990  
ID ADEI4990 standard; DNA; 18 BP.  
XX  
AC ADEI4990;  
XX  
XX 29-JAN-2004 (first entry)  
DT  
DE Beer spoilage-associated primer SEQ ID 185.  
XX ss; primer; detection; beer-spoilage; lactic acid bacteria;  
XX Gram-negative bacteria; spoilage bacteria.  
XX Lactobacillus buchneri.  
XX WQ2002103043-A2.  
PN  
XX 27-DEC-2002.  
PD  
XX 19-JUN-2002; 2002WO-EP006808.  
PF  
XX 19-JUN-2001; 2001DE-01029410.  
PR  
XX (VERM-) VERMICON AG.  
PA  
XX Beimfohr C, Snaird J;  
PI  
XX WPI; 2003-175243/17.  
DR  
XX  
XX New oligonucleotides, useful for rapid detection of beer-spoilage  
PT bacteria by in situ hybridization, are specific for type, genus or  
PT species.  
XX  
XX Claim 1; SEQ ID NO 185; 88pp; German.  
PS  
XX This invention describes novel oligonucleotides used in a method for  
CC detecting beer-spoilage bacteria in a sample. The bacteria detected  
CC include lactic acid bacteria of the genera Lactobacillus or Pediococcus,  
CC especially the species L. coryniformis, L. perolens, L. buchneri, L.  
CC plantarum, L. fructivorans, L. lindneri, L. casei, L. brevis or P.  
CC damnosus or Gram-negative bacteria of the genera Pectinatus and  
CC Megaspheara, specifically P. frisingensis, P. cerevisiophilus and M.  
CC cerevisiae. The oligonucleotides of the invention provide rapid detection  
CC of spoilage bacteria (typically within 48 hours, compared with 7-12 days  
CC for conventional culture methods), can detect all relevant bacteria in  
CC parallel, can differentiate between species of the same genus, and are  
CC easy to use. ADEI4806-ADEI5247 represent the oligonucleotides used in the  
CC method of the invention.  
XX  
XX Sequence 18 BP; 1 A; 4 C; 11 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 7.8e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 229 ACTGCTGTGTGGCGG 245  
Db 2 AGCGGTGGCGGTGGCGG 18  
  
RESULT 989  
ADEI3509/c  
ID ADEI3509 standard; DNA; 18 BP.  
XX  
AC ADEI3509;  
XX  
XX 29-JAN-2004 (first entry)  
DT  
XX HLA class I allele specific primer #125.  
DE ss; primer; PCR; human; Human Leukocyte Antigen; HLA; genotype.  
XX Homo sapiens.  
XX OS  
XX US2003165884-A1.  
PN  
XX 04-SEP-2003.  
PD  
XX 25-APR-2002; 2002US-00133779.  
PF  
XX 20-DEC-1999; 99US-0172768P.  
PR  
XX 20-DEC-2000; 2000US-00747391.  
PR  
XX (STEM-) STEMCYTE INC.  
PA  
XX Chow R, Tonai R;  
PI  
XX WPI; 2003-874916/81.  
DR  
XX  
XX Identifying class I or II Human Leukocyte Antigen genotypes using  
PT hybridization and amplification assays.  
PT  
XX Claim 7; SEQ ID NO 127; 66pp; English.  
PS  
XX The invention relates to a method of identifying a class I or II Human  
CC Leukocyte Antigen (HLA) genotype of a subject using hybridisation and  
CC amplification assay. The method is used for determining the HLA genotype  
CC of a subject. The present sequence represents a HLA class I allele  
CC specific primer.  
XX  
XX Sequence 18 BP; 3 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 7.8e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 503 CTGAGGGCTACCTGGAG 519  
Db 18 CTGAGGCTACCTGGAG 2  
  
RESULT 990  
AAT11974/c  
ID AAT11974 standard; DNA; 19 BP.  
XX  
AC AAT11974;  
XX  
XX 25-MAR-2003 (revised)  
DT  
XX 13-MAR-1996 (first entry)  
PR  
XX CMV antisense oligonucleotide (ISIS 5478).  
DE  
XX antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;

KW intermediate early complex; IE1, IE2; DNA polymerase gene; ss.

XX Synthetic.

OS Key Location/Qualifiers

XX modified\_base 1..19

FT /\*tag= a

FT /note= "phosphorothioate backbone"

XX US5442049-A.

XX 15-AUG-1995.

XX 25-JAN-1993; 93US-00009263.

XX 19-NOV-1992; 92US-00927506.

XX (ISIS-) ISIS PHARM INC.

XX Baker B, Draper K, Anderson K;

XX WPI; 1995-292538/38.

XX New oligo-nucleotide inhibits cytomegalovirus replication - by binding to  
FT a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and  
FT treatment of CMV diseases.

PS Example 10; Col 17; 6pp; English.

XX AAT11971-84 are antisense oligonucleotides (ONS) against human  
CC cytomegalovirus (CMV) that displayed activities of at least 50 % of  
CC control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal  
CC mismatches could be tolerated without loss of antiviral activity.  
CC Antisense ONS targeting CMV DNA or RNA coding for the IE1, IE2 or DNA  
CC polymerase proteins have been shown to be effective in therapy,  
CC prophylaxis and diagnosis of CMV infection. The ONS may be modified to  
CC reduce nuclease resistance and to increase their efficacy. Modifications  
CC include phosphorothioate backbones, alkyl and halogen-substituted sugar  
CC moieties at the 2' position. (Updated on 25-MAR-2003 to correct PF  
CC field.)

XX Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;

Best Local Similarity 88.2%; Pred. No. 8.2e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 133 ATGAAGAAGATCAACG 149

DB 18 AAGAAGAGAGCAACG 2

RESULT 991

AAT01676/c

ID AAT01676 standard; DNA; 19 BP.

XX AC AAT01676;

XX 17-DEC-1995 (first entry)

DE Peptide nucleic acid targeting CMV IE2 nuc sig 2.

XX peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;

XX antiviral; diagnostic; ss.

XX Synthetic.

XX Key Location/Qualifiers

XX misc\_feature 1..19

FT /\*tag= a

FT /note= "at least one (and preferably all) of the backbone  
FT subunits are composed of anide units, so that the  
FT oligomer consists of the nucleobases attached covalently

to a polyamide backbone"

XX WO9504748-A1.

XX 16-FEB-1995.

XX 09-AUG-1994; 94WO-US009039.

XX 09-AUG-1993; 93US-00104438.

XX (ISIS-) ISIS PHARM INC.

XX Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowseert LM;

XX WPI; 1995-090841/12.

XX New peptide nucleic acid oligomers hybridisable to cytomegalovirus or

XX papilloma: virus - are stable antisense molecules with high affinity for

XX single stranded DNA, used for treating infections.

XX Claim 2; Page 44; 65pp; English.

XX New oligomers are claimed which (A) have at least one peptide nucleic  
CC acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5'  
CC untranslated region, intron/exon (1/5) junction or coding sequence of  
CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or  
CC hybridisable to the E, E2, E4, E5, E6, E7, I1 or I2 reading frames of a  
CC papillomavirus. The PNAs can be used to target RNA and single stranded  
CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence  
CC they may be used therapeutically for modulating cytomegalovirus and  
CC papillomavirus processes and also as diagnostics (e.g., as probes for  
CC specific mRNAs). PNA oligomers have high affinity for complementary  
CC single stranded DNA. They are also able to form triple helices in which a  
CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds  
CC with the resulting double helix or with the first PNA strand. The PNAs  
CC possess no significant charge and are water soluble, which facilitates  
CC cellular uptake. Further, since they contain amides of non-biological  
CC amino acids, they are biostable and resistant to enzymatic degradation by  
CC proteases. The present sequence targets CMV IE2 nuclear localisation  
CC signal 2

XX Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;

Best Local Similarity 88.2%; Pred. No. 8.2e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 133 ATGAAGAAGATCAACG 149

DB 18 AAGAAGAGAGCAACG 2

RESULT 992

AAT67044/c

ID AAT67044 standard; DNA; 19 BP.

XX AC AAT67044;

XX 04-AUG-1997 (first entry)

DE PCR primer DP17 for org gene probe preparation.

XX Salmonella typhimurium; org gene; polymerase chain reaction; PCR; primer;  
KW oxygen-regulated gene; ss.  
XX Synthetic.  
XX WO9718225-A1.  
XX 22-MAY-1997.  
XX 14-NOV-1996; 96WO-US018504.

PR 14-NOV-1995; 95US-0006733P.  
XX (GEO ) GEN HOSPITAL CORP.  
XX Miller SI;  
XX WPI; 1997-289217/26.  
XX New isolated Salmonella secreted proteins and related genes - used to  
PT develop products for the detection, treatment or prevention of Salmonella  
PT infections.  
XX Example 1; Page 29; 95pp; English.  
XX PCR primers DP15 (AA767043) and DP17 (AA767044) were used to amplify a  
CC 724-bp org gene probe. The probe can be used to identify the Salmonella  
CC typhimurium oxygen-regulated gene (org)  
XX Sequence 19 BP; 2 A; 7 C; 5 G; 5 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1272 GGAGACGTGCCAGGCA 1288  
DB 18 GGAGAACTGCCAGGCA 2  
RESULT 993  
AAX10245  
ID AAX10245 standard; DNA; 19 BP.  
XX AC AAX10245;  
XX 24-MAR-1999 (first entry)  
XX Human biallelic polymorphic marker downstream primer #51.  
XX Polymorphism; biallelic; human; forensic; paternity testing; disease;  
KW detection; phenotypic typing; characteristic; infection; hereditary;  
KW autoimmune disease; cancer; inflammation; drug; therapy; medication;  
KW treatment; marker; primer; ss.  
XX Synthetic.  
OS Homo sapiens.  
XX WO9820165-A2.  
XX 14-MAY-1998.  
XX 05-NOV-1997; 97WO-US020313.  
XX 06-NOV-1996; 96US-0030455P.  
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
XX Lander ES, Wang D, Hudson T;  
XX WPI; 1998-286974/25.  
XX New isolated nucleic acid segments from the human genome - used for  
PT determining polymorphic forms for use in e.g. forensics, paternity  
PT testing or phenotypic typing for disease.  
XX Claim 16; Page 219; 310pp; English.  
XX AAX09121-X10268 are allele-specific oligonucleotide primers used in the  
CC isolation of various biallelic polymorphic markers found in the human  
CC genome (represented in AAX10269-X12937). These primers can be used in a  
CC method for determining polymorphic forms in an individual for use in e.g.  
CC forensics, paternity testing or for phenotypic typing for diseases such  
CC as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular

CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial  
CC hypercholesterolemia, polycystic kidney disease, hereditary  
CC spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary  
CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos  
CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,  
CC autoimmune diseases, inflammation, cancer, diseases of the nervous  
CC system, infection by pathogenic microorganisms, and characteristics such  
CC as longevity, appearance (e.g. baldness, obesity), strength, speed,  
CC endurance, fertility, and susceptibility or receptivity to particular  
CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid  
CC segments can also be used to produce medicaments for the treatment or  
XX prophylaxis of such diseases  
XX Sequence 19 BP; 8 A; 6 C; 4 G; 1 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1297 AACGAGGAGTTCAGAC 1313  
DB 1 AACGAGGAGTTCAGAC 17  
RESULT 994  
AAV01575  
ID AAV01575 standard; DNA; 19 BP.  
XX AC AAV01575;  
XX 01-JUN-1998 (first entry)  
XX H. capsulatum rRNA ITS1 primer 1724F.  
XX Internal transcribed spacer; ITS; ribosomal RNA; 18S; 5.8S; ss; primer;  
KW PCR; amplification; probe; hybridisation; detection; histoplasmosis.  
XX Synthetic.  
OS Ajellomyces capsulatus.  
XX US5693501-A.  
XX 02-DEC-1997.  
XX 08-MAR-1995; 95US-00400580.  
XX 08-MAR-1995; 95US-00400580.  
XX (INDV ) UNIV INDIANA ADVANCED RES & TECHNOLOGY.  
XX Jiang B, Lee C;  
XX WPI; 1998-031751/03.  
XX Histoplasma capsulatum DNA sequences - useful as primers for diagnosing  
PT histoplasmosis.  
XX Example 1; Col 5; 10pp; English.  
XX Primers AAV01575-V01576 were used to amplify the internal transcribed  
CC spacer 1 (ITS1) sequence from the Histoplasma capsulatum large subunit  
CC ribosomal genes (AAV01567). The ITS1 sequence corresponds to the region  
CC between the 3' end of the 18S ribosomal gene and the 5' end of the 5.8S  
CC ribosomal gene. The ITS1 sequence was PCR amplified from isolated DNA  
CC from both the yeast and mycelial forms of H. capsulatum. Fragments of the  
CC sequence (e.g. AAV01568-V01574) can be used as primers and probes for H.  
CC capsulatum infection (histoplasmosis) in a patient  
XX Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

QY 622 AAGCTGACAACTGGG 638
DB 1 AAGCTGGTCAACTGG 17

RESULT 995
AAAX17891/c
ID AAAX17891 standard; DNA; 19 BP.
XX
AC AAAX17891;
XX
DT 11-MAY-1999 (first entry)
XX
DE Anti-CMV oligonucleotide #5478.
XX
KW Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
KW cytomegalovirus; inhibition; replication; sugar modification;
KW phosphorothioate; infection; retinitis; ss.
XX
OS Synthetic.
OS Human herpesvirus 5.
XX
PN WO9845314-A1.
XX
PD 15-OCT-1998.
XX
PF 07-APR-1998; 98WO-US006895.
XX
PR 09-APR-1997; 97US-00838715.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Draper KG, Kisner DL, Anderson KP, Chapman S;
XX
DR WPI; 1998-568330/48.
XX
PT New antisense oligonucleotides that target cytomegalovirus nucleic acid -
PT particularly including 2-methoxyethoxy sugar modifications, especially
PT for treating viral retinitis, with long-lasting retention in the retina.
XX
PS Claim 7; Page 30; 99pp; English.
XX
CC Antisense oligonucleotides (AAAX17861-X17924) are targeted to a nucleic
CC acid (AAAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA
CC polymerase of cytomegalovirus (CMV) and are able to inhibit CMV
CC replication. Optionally the oligonucleotides include at least one 2'-(2-
CC methoxyethoxy) sugar modification or phosphorothioate internucleotide
CC linkages. The oligonucleotides are used to inhibit CMV infections (by in
CC vivo or in vitro contact with cells, tissues or body fluids), especially
CC to treat or prevent CMV infections, particularly retinitis
XX
SQ Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 133 ATGAAGAGATCAAAACG 149
DB 18 AAGAAGAGAGCAACG 2

RESULT 996
AAAX04627/c
ID AAAX04627 standard; DNA; 19 BP.
XX
AC AAAX04627;
XX
DT 12-APR-1999 (first entry)
XX
DE PCR primer Taa4R used to amplify alpha-tubulin.
XX
XX

KW Gibberellin 4; GA4; beta-hydroxylase; GA4 homologue; GA4H; GA4H1; GA4H2;
KW plant growth hormone; seed germination; stem elongation; flowering;
KW fruiting; stem growth; alpha-tubulin; PCR primer; ss.
XX
OS Synthetic.
XX
PN WO9859057-A1.
XX
PD 30-DEC-1998.
XX
PF 24-JUN-1998; 98WO-US013044.
XX
PR 24-JUN-1997; 97US-0050615P.
XX
PA (GEHO) GEN HOSPITAL CORP.
PA (GOOD/) GOODMAN H M.
PA (NGUY/) NGUYEN L V.
PA (CHIA/) CHIANG H.
XX
PI Goodman HM, Nguyen LV, Chiang H;
XX
DR WPI; 1999-105626/09.
XX
PT New isolated Gibberellin 4 homologues - derived from Arabidopsis plants,
PT used to develop products for altering stem growth, e.g. for enhancing
PT stem elongation, flowering and fruiting.
XX
PS Example 5; Page 33; 106pp; English.
XX
CC PCR primers AAX04626-27 were used to amplify the alpha-tubulin 4 gene.
CC The primers are used as an internal control when determining expression
CC of the GA4H1 gene. GA4H1 is a gibberellin 4 (GA4) homologue. The GA4H
CC proteins (GA4H1 and GA4H2) have similar functions to GA4. GA4H is
CC believed to be a member of the enzyme family involved in the biosynthesis
CC of the gibberellin family of plant growth hormones that promote various
CC growth and developmental processes in higher plants, such as seed
CC germination, stem elongation, flowering and fruiting. GA4 is a beta-
CC hydroxylase, and the homologues may also have 3-beta-hydroxylase
CC activity, which is critical for controlling stem growth. GA4H may be
CC applied to crops to enhance and facilitate stem elongation, flowering and
CC fruiting. Alternatively, the DNA encoding GA4H may be genetically
CC inserted into the plant host to produce a similar effect
XX
SQ Sequence 19 BP; 3 A; 6 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1517 TAAAGGAGATTCAGCTA 1533
DB 17 TAAAGGAGATGCAGCTA 1

RESULT 997
AAZ36588/c
ID AAZ36588 standard; DNA; 19 BP.
XX
AC AAZ36588;
XX
DT 22-FEB-2000 (first entry)
XX
DE Probe hybridising to nucleotides of human c-erb-B-2 (HER-2).
XX
KW Human; c-erb-B-2; HER-2; chromosome aberration; probe;
KW peptide nucleic acid; haemopoietic malignancy; cancer;
KW inborn constitutional disease; herbicide resistance gene; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9957309-A1.
XX
XX

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PD 11-NOV-1999.  
 XX  
 PF 04-MAY-1999; 99WO-DK000245.  
 XX  
 PR 04-MAY-1998; 98DK-00000615.  
 XX  
 PA (DAKO-) DAKO AS.  
 XX  
 PI Pluzek K, Nielsen KV, Adelhorst K;  
 XX  
 DR WPI; 2000-038821/03.  
 XX  
 PT Detection of chromosome aberrations, used for detecting diseases and  
 PT disorders, infections, and plant alterations related to e.g. herbicide  
 PT resistance.  
 XX  
 PS Example 1; Page 44; 63pp; English.  
 XX  
 CC Oligonucleotides AAZ36562-97 represent a set of probes hybridising to the  
 CC human c-erb-B-2 (HER-2) gene. The probes are used to demonstrate the  
 CC method of the invention. The specification describes a method for the  
 CC detection of chromosome aberrations in eukaryotic samples uses sets of  
 CC peptide nucleic acid (PNA) probes in hybridisation reactions. The method  
 CC comprises using at least 2 sets of hybridisation probes, where at least  
 CC one set comprises one or more PNA probes capable of hybridising to  
 CC specific nucleic acid sequences related to a potential aberration in a  
 CC chromosome. The methods can be used for the detection of chromosome  
 CC aberrations. They can be used for the diagnosis of disorders and diseases  
 CC related to chromosomal aberrations or abnormalities such as e.g.  
 CC haematopoietic malignancies, cancers and inborn constitutional diseases. The  
 CC method may be used for detecting viral sequences and their localization  
 CC in the chromosome. In plant biology, the methods can be used for  
 CC monitoring the efficiency of transferring herbicide resistance genes to a  
 CC plant  
 XX  
 SQ Sequence 19 BP; 3 A; 5 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 19;  
 Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 654 CACCGTCTACAGGCA 670  
 DB 18 CACAGTCTACAGGCA 2  
 RESULT 998  
 AA82434  
 ID AA82434 standard; DNA; 19 BP.  
 XX  
 AC AA82434;  
 XX  
 DT 04-DEC-2000 (first entry)  
 XX  
 DE cdk1 ribozyme binding site #20.  
 XX  
 KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
 XX  
 OS Mammalia.  
 XX  
 FN WO200032765-A2.  
 XX  
 PD 08-JUN-2000.  
 XX  
 PF 06-DEC-1999; 99WO-US028772.  
 XX  
 PR 04-DEC-1998; 98US-0110954P.  
 XX  
 PA (IMMU-) IMMUSOL INC.  
 XX  
 FI Tritz R, Welch PJ, Barber JR, Robbins JM;  
 XX  
 DR WPI; 2000-412314/35.  
 The present invention relates to a hairpin or hammerhead ribozyme,  
 designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
 other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
 Representative examples of ribozyme recognition sites are given in  
 AA82415 to AA86787. The ribozyme of the invention is useful for  
 inhibiting restenosis by introduction of the ribozyme into cells. The  
 ribozyme is resistant to endonuclease activity and hence is efficient in  
 restenosis treatment

XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
 PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
 PT PCNA and Cyclin B1.  
 XX  
 PS Disclosure; Page 46; 109pp; English.  
 XX  
 CC The present invention relates to a hairpin or hammerhead ribozyme,  
 CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
 CC Representative examples of ribozyme recognition sites are given in  
 CC AA82415 to AA86787. The ribozyme of the invention is useful for  
 CC inhibiting restenosis by introduction of the ribozyme into cells. The  
 CC ribozyme is resistant to endonuclease activity and hence is efficient in  
 CC restenosis treatment  
 XX  
 SQ Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 19;  
 Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1138 TACTCCACTCAGATTGA 1154  
 DB 1 TACTCCACTCAGAAAGA 17  
 RESULT 999  
 AA82874  
 ID AA82874 standard; DNA; 19 BP.  
 XX  
 AC AA82874;  
 XX  
 DT 04-DEC-2000 (first entry)  
 XX  
 DE cdk4 ribozyme binding site #55.  
 XX  
 KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
 XX  
 OS Mammalia.  
 XX  
 FN WO200032765-A2.  
 XX  
 PD 08-JUN-2000.  
 XX  
 PF 06-DEC-1999; 99WO-US028772.  
 XX  
 PR 04-DEC-1998; 98US-0110954P.  
 XX  
 PA (IMMU-) IMMUSOL INC.  
 XX  
 FI Tritz R, Welch PJ, Barber JR, Robbins JM;  
 XX  
 DR WPI; 2000-412314/35.  
 New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
 PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
 PT PCNA and Cyclin B1.  
 XX  
 PS Disclosure; Page 53; 109pp; English.  
 XX  
 CC The present invention relates to a hairpin or hammerhead ribozyme,  
 CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
 CC Representative examples of ribozyme recognition sites are given in  
 CC AA82415 to AA86787. The ribozyme of the invention is useful for  
 CC inhibiting restenosis by introduction of the ribozyme into cells. The  
 CC ribozyme is resistant to endonuclease activity and hence is efficient in  
 CC restenosis treatment  
 XX  
 SQ Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 19;  
 WPI; 2000-412314/35.

Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 973 CACCGAGACTCAAGCC 989  
DB 1 CACCGAGACTCAAGCC 17

RESULT 1000  
AAA82729  
ID AAA82729 standard; DNA; 19 BP.  
XX  
AC AAA82729;  
XX  
DT 04-DEC-2000 (first entry)  
XX  
DE cdk3 ribozyme binding site #14.  
XX  
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX  
OS Mammalia.  
XX  
FN WO200032765-A2.  
XX  
PD 08-JUN-2000.  
XX  
PF 06-DEC-1999; 99WO-US028772.  
XX  
PR 04-DEC-1998; 98US-0110954P.  
XX  
PA (IMMU-) IMMUSOL INC.  
XX  
PI Tritz R, Welch PJ, Barber JR, Robbins JM;  
XX  
DR WPI; 2000-412314/35.  
XX  
PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PCNA and Cyclin B1.  
XX  
PS Disclosure; Page 50; 109pp; English.  
XX  
SQ Sequence 19 BP; 4 A; 6 C; 5 G; 4 T; 0 U; 0 Other;  
XX  
CC The present invention relates to a hairpin or hammerhead ribozyme,  
designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
restenosis treatment  
XX  
SQ Sequence 19 BP; 4 A; 6 C; 5 G; 4 T; 0 U; 0 Other;  
XX  
Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 760 TCCGTGCTCAAGACCT 776  
DB 2 TCGCTGCTCAAGAACT 18

RESULT 1001  
AAA84423  
ID AAA84423 standard; DNA; 19 BP.  
XX  
AC AAA84423;  
XX  
DT 04-DEC-2000 (first entry)  
XX  
DE Cyclin D3 ribozyme binding site #35.  
XX  
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX Mammalia.  
OS  
XX WO200032765-A2.  
XX  
XX 08-JUN-2000.  
PD  
XX 06-DEC-1999; 99WO-US028772.  
XX  
XX 04-DEC-1998; 98US-0110954P.  
PR  
XX (IMMU-) IMMUSOL INC.  
XX  
XX Tritz R, Welch PJ, Barber JR, Robbins JM;  
PI  
XX WPI; 2000-412314/35.  
DR  
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PCNA and Cyclin B1.  
PT  
XX Disclosure; Page 76; 109pp; English.  
PS  
XX The present invention relates to a hairpin or hammerhead ribozyme,  
designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
restenosis treatment  
CC  
XX Sequence 19 BP; 3 A; 3 C; 9 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 272 GTGCTGCTCCTGGGAA 288  
DB 2 GTGCTGCTCCTAGGAA 18

RESULT 1002  
AAA82887  
ID AAA82887 standard; DNA; 19 BP.  
XX  
AC AAA82887;  
XX  
DT 04-DEC-2000 (first entry)  
XX  
DE cdk4 ribozyme binding site #68.  
XX  
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX  
OS Mammalia.  
XX  
XX WO200032765-A2.  
FN  
XX 08-JUN-2000.  
PD  
XX 06-DEC-1999; 99WO-US028772.  
XX  
XX 04-DEC-1998; 98US-0110954P.  
PR  
XX (IMMU-) IMMUSOL INC.  
XX  
XX Tritz R, Welch PJ, Barber JR, Robbins JM;  
PI  
XX WPI; 2000-412314/35.  
DR  
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT

PT PCNA and Cyclin B1.

PS Disclosure; Page 53; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment

SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;

Best Local Similarity 88.2%; Pred. No. 8.2e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1090 GTGACACTGTGTACCG 1106

DB 2 GTTACACTGTGTACCG 18

RESULT 1003

AAA83020

ID AAA83020 standard; DNA; 19 BP.

AC AAA83020;

XX 04-DEC-2000 (first entry)

XX cdk6 ribozyme binding site #80.

XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX Mammalia.

XX WO200032765-A2.

XX 08-JUN-2000.

XX 06-DEC-1999; 99WO-US028772.

XX 04-DEC-1998; 98US-0110954P.

XX (IMMU-) IMMUSOL INC.

XX Tritz R, Welch PJ, Barber JR, Robbins JM;

XX WPI; 2000-412314/35.

XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.

XX Disclosure; Page 55; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment

SQ Sequence 19 BP; 3 A; 3 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;

Best Local Similarity 88.2%; Pred. No. 8.2e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1159 TGGGCTGTGGCTGCAT 1175

DB 2 TGGAGTGTGGCTGCAT 18

RESULT 1004

AAA82748

ID AAA82748 standard; DNA; 19 BP.

XX AAA82748;

XX 04-DEC-2000 (first entry)

XX cdk3 ribozyme binding site #33.

XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX Mammalia.

XX WO200032765-A2.

XX 08-JUN-2000.

XX 06-DEC-1999; 99WO-US028772.

XX 04-DEC-1998; 98US-0110954P.

XX (IMMU-) IMMUSOL INC.

XX Tritz R, Welch PJ, Barber JR, Robbins JM;

XX WPI; 2000-412314/35.

XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.

XX Disclosure; Page 51; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment

SQ Sequence 19 BP; 2 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;

Best Local Similarity 88.2%; Pred. No. 8.2e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 919 TTCTGTTCAGTGCT 935

DB 3 TACCTCTCCAGTGCT 19

RESULT 1005

AAA82639

ID AAA82639 standard; DNA; 19 BP.

XX AAA82639;

XX 04-DEC-2000 (first entry)

XX cdk2 ribozyme binding site #76.

XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX Mammalia.

XX

PN WO200032765-A2.  
XX  
PD 08-JUN-2000.  
XX  
PF 06-DEC-1999; 99WO-US028772.  
XX  
PR 04-DEC-1998; 98US-0110954P.  
XX  
PA (IMMU-) IMMUSOL INC.  
XX  
PI Tritz R, Welch PJ, Barber JR, Robbins JM;  
XX  
DR WPI; 2000-412314/35.  
XX  
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.  
XX  
XX Disclosure; Page 49; 109pp; English.  
XX  
XX The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AA82415 to AA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX  
XX Sequence 19 BP; 6 A; 5 C; 3 G; 5 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1022 TCAAGCTGGCTGACTTT 1038  
DB 3 TCAAGCTAGCAGACTTT 19  
RESULT 1006  
ID AAA82749 standard; DNA; 19 BP.  
XX  
AC AAA82749;  
XX  
DT 04-DEC-2000 (first entry)  
XX  
DE cdk3 ribozyme binding site #34.  
XX  
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX  
OS Mammalia.  
XX  
PN WO200032765-A2.  
XX  
PD 08-JUN-2000.  
XX  
PF 06-DEC-1999; 99WO-US028772.  
XX  
PR 04-DEC-1998; 98US-0110954P.  
XX  
PA (IMMU-) IMMUSOL INC.  
XX  
PI Tritz R, Welch PJ, Barber JR, Robbins JM;  
XX  
DR WPI; 2000-412314/35.  
XX  
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.  
XX  
XX Disclosure; Page 51; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AA82415 to AA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX  
XX Sequence 19 BP; 2 A; 8 C; 3 G; 6 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 919 TTCTCTTCCAGCTGCT 935  
DB 2 TACCTCTTCCAGCTGCT 18  
RESULT 1007  
ID AAF91202 standard; DNA; 19 BP.  
XX  
AC AAF91202;  
XX  
DT 04-MAY-2001 (first entry)  
XX  
DE Human multi drug resistance-1 gene related sequence SEQ ID NO: 289.  
XX  
KW Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;  
KW inflammatory disease; neuronal disease; CNS disease;  
KW cardiovascular disease; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200109183-A2.  
XX  
PD 08-FEB-2001.  
XX  
PF 28-JUL-2000; 2000WO-BP007314.  
XX  
PR 30-JUL-1999; 99EP-00114938.  
XX  
PR 22-FEB-2000; 2000EP-00103361.  
XX  
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
XX  
PI Brinkmann U, Hoffmeyer S, Eichelbaum M, Roots I;  
XX  
DR WPI; 2001-159855/16.  
XX  
XX New polynucleotide encoding a molecular variant Multi Drug Resistance  
PT (MDR)-1 polypeptide is useful for diagnosing and treating diseases  
PT associated with abnormal MDR-1 expression or function, e.g. cancer.  
XX  
PS Disclosure; Page 136; 154pp; English.  
XX  
XX The present invention provides nucleotides encoding molecular variants of  
CC the human multi drug resistance-1 (MDR-1) protein. These can be used to  
CC identify compounds capable of treating multidrug resistance and  
CC sensitivity interfering resulting from polymorphisms in MDR-1, which can  
CC lead to difficulties in treating cancer, cardiovascular, neuronal,  
CC inflammatory and CNS diseases  
XX  
XX Sequence 19 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 1 Other;  
SQ  
Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 78.9%; Pred. No. 8.2e+02;  
Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;  
QY 388 TCCTCGGATGAGTGCACT 406  
||||| : : |||||

Db 1 TCCTCTGAGRATGCGAGT 19  
RESULT 1008  
AAF91204/c  
ID AAF91204 standard; DNA; 19 BP.  
XX AAF91204;  
AC AAF91204;  
XX 04-MAY-2001 (first entry)  
XX Human multi drug resistance-1 gene related sequence SEQ ID NO: 291.  
XX Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;  
XX inflammatory disease; neuronal disease; CNS disease;  
XX cardiovascular disease; PCR primer; ss.  
XX Homo sapiens.  
OS WO200109183-A2.  
PN 08-FEB-2001.  
PD 28-JUL-2000; 2000WO-EP007314.  
XX 30-JUL-1999; 99EP-00114938.  
XX 22-FEB-2000; 2000EP-00103361.  
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
XX Brinkmann U, Hoffmeyer S, Eichelbaum M, Roots I;  
PI WPI; 2001-159855/16.  
XX New polynucleotide encoding a molecular variant Multi Drug Resistance  
PT (MDR)-1 polypeptide is useful for diagnosing and treating diseases  
PT associated with abnormal MDR-1 expression or function, e.g. cancer.  
XX Disclosure; Page 137; 154pp; English.  
XX The present invention provides nucleotides encoding molecular variants of  
CC the human multi drug resistance-1 (MDR-1) protein. These can be used to  
CC identify compounds capable of treating multidrug resistance and  
CC sensitivity interfering resulting from polymorphisms in MDR-1, which can  
CC lead to difficulties in treating cancer, cardiovascular, neuronal,  
CC inflammatory and CNS diseases  
XX Sequence 19 BP; 6 A; 5 C; 4 G; 3 T; 0 U; 1 Other;  
SQ Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 78.9%; Pred. No. 8.2e+02;  
Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;  
Qy 388 TCCTCGGATGAGTGCGAGT 406  
||||| : |||||  
Db 19 TCCTCTGAGRATGCGAGT 1  
RESULT 1009  
AAH58036  
ID AAH58036 standard; DNA; 19 BP.  
XX AAH58036;  
AC AAH58036;  
XX 10-SEP-2001 (first entry)  
XX Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:460.  
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
XX recognition site; target; ribozyme binding site; eye disease; vulnery;  
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
XX matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;  
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.  
XX Homo sapiens.  
OS Synthetic.  
PN WO200130362-A2.  
XX 03-MAY-2001.  
XX 26-OCT-2000; 2000WO-US029500.  
XX 26-OCT-1999; 99US-0161532P.  
XX (IMMU-) IMMUSOL INC.  
XX Robbins JM, Tritz R;  
PI WPI; 2001-300427/31.  
XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
PT that cleave RNA encoding cytokines involved in inflammation, matrix  
PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
XX Example 1; Page 105; 408pp; English.  
XX The present invention describes a method for treating a proliferative  
CC skin or eye disease and scarring. The method involves administering a  
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
CC dependent kinase, growth factor or a reductase, or administering a  
CC nucleic acid molecule (II) comprising a promoter operably linked to a  
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,  
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
CC ophthalmological, vulnery, keratolytic and virucide activities, and  
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic  
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, reinitopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention  
XX Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 973 CACCGAGACCTCAAGCC 989  
||||| : |||||  
Db 1 CACCGAGATCTGAGCC 17  
RESULT 1010  
AAH59585  
ID AAH59585 standard; DNA; 19 BP.  
XX AAH59585;  
AC AAH59585;  
XX 10-SEP-2001 (first entry)  
XX Cyclin D3 ribozyme binding site SEQ ID NO:2009.  
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
XX recognition site; target; ribozyme binding site; eye disease; vulnery;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;

|             |   |
|-------------|---|
| KW          | cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;         |
| KW          | matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; |
| KW          | antiporsitic; dermatological; antiseborrheic; antidiabetic; virucide;     |
| KW          | antisklicking; ophthalmological; keratolytic; gene therapy; viral wart;   |
| KW          | atopic dermatitis; actinic keratosis; squamous cell carcinoma;            |
| KW          | basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;           |
| KW          | sickle cell retinopathy; ss.  |
| XX          |   |
| XX          | Homo sapiens.   |
| OS          | Synthetic.  |
| PN          | WO200130362-A2.   |
| XX          |   |
| PD          | 03-MAY-2001.  |
| XX          |   |
| PF          | 26-OCT-2000; 2000WO-US029500.   |
| XX          |   |
| PR          | 26-OCT-1999; 99US-0161532P.   |
| XX          |   |
| PA          | (IMMU-) IMMUSOL INC.  |
| XX          |   |
| PI          | Robbins JM, Tritz R;  |
| XX          |   |
| DR          | WPI; 2001-300427/31.  |
| XX          |   |
| PT          | Treating proliferative skin or eye diseases and scarring, using ribozymes |
| PT          | that cleave RNA encoding cytokines involved in inflammation, matrix       |
| PT          | metalloproteinases, growth factors and cell-cycle dependent kinases.      |
| XX          |   |
| PS          | Example 1; Page 218; 408pp; English.                                      |
| XX          |   |
| CC          | The present invention describes a method for treating a proliferative     |
| CC          | skin or eye disease and scarring. The method involves administering a     |
| CC          | ribozyme (I) which cleaves RNA encoding a cytokine involved in            |
| CC          | inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle          |
| CC          | dependent kinase, growth factor or a reductase, or administering a        |
| CC          | nucleic acid molecule (II) comprising a promoter operably linked to a     |
| CC          | cell cycle segment encoding (I). (I) can have antiporsitic,               |
| CC          | dermatological, cytostatic, antiseborrheic, antidiabetic, antisklicking,  |
| CC          | ophthalmological, vulvar, keratolytic and virucide activities, and        |
| CC          | cleaves RNA encoding cytokine involved in inflammation. (I) can be used   |
| CC          | in gene therapy. (I) and (II) are useful for treating proliferative skin  |
| CC          | diseases such as psoriasis, atopic dermatitis, actinic keratosis,         |
| CC          | squamous or basal cell carcinoma and viral or seborrheic wart. They can   |
| CC          | also be used for treating proliferative eye diseases such as diabetic     |
| CC          | retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of   |
| CC          | prematurity and retinal detachment, and for treating and preventing       |
| CC          | scarring such as keloid, adhesion and hypertrophic or hypertrophic burn   |
| CC          | scar. AAH57577 to AAH62039 represent sequences used in the                |
| CC          | exemplification of the present invention                                  |
| XX          |   |
| SQ          | Sequence 19 BP; 3 A; 3 C; 9 G; 4 T; 0 U; 0 Other;                         |
|             |   |
|             | Query Match 0.8%; Score 13.8; DB 1; Length 19;                            |
|             | Best Local Similarity 88.2%; Pred. No. 8 2e+02;                           |
|             | Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0                |
| Qy          | 272 GTGCTGCTCCTGGGAA 288  |
|             |   |
| Db          | 2 GTGCTGCTCCTAGGAA 18   |
|             |   |
| RESULT 1011 |   |
| AAH57801    |   |
| ID          | AAH57801 standard; DNA; 19 BP.  |
| XX          |   |
| AC          | AAH57801;   |
| XX          |   |
| DT          | 10-SEP-2001 (first entry)   |
| XX          |   |
| DE          | Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:225.     |
| XX          |   |
| KW          | Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;           |

|  |   |
|--|---|
| KW   | recognition site; target; ribozyme binding site; eye disease; vulnery;    |
| KW   | proliferative disease; skin disease; psoriasis; diabetic retinopathy;     |
| KW   | cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;         |
| KW   | matrix metalloproteinase; growth factor; reductase; scarring; cytosatic;  |
| KW   | antipsoptic; dermatological; antiseborrheic; antidiabetic; virucide;      |
| KW   | antisickling; ophthalmological; keratolytic; gene therapy; viral wart;    |
| KW   | atopic dermatitis; actinic keratosis; squamous cell carcinoma;            |
| KW   | basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;           |
| KW   | sickle cell retinopathy; ss.  |
| XX   |   |
| OS   | Homo sapiens.   |
| OS   | Synthetic.  |
| PN   | WO200130362-A2.   |
| XX   |   |
| PD   | 03-MAY-2001.  |
| XX   |   |
| PF   | 26-OCT-2000; 2000WO-US029500.   |
| XX   |   |
| PR   | 26-OCT-1999; 99US-0161532P.   |
| XX   |   |
| PA   | (IMMU-) IMMUSOL INC.  |
| XX   |   |
| PI   | Robbins JM, Tritz R;  |
| XX   |   |
| DR   | WPI; 2001-300427/31.  |
| XX   |   |
| FT   | Treating proliferative skin or eye diseases and scarring, using ribozymes |
| PT   | that cleave RNA encoding cytokines involved in inflammation, matrix       |
| PT   | metalloproteinases, growth factors and cell-cycle dependent kinases.      |
| XX   |   |
| PS   | Example 1; Page 88; 408pp; English.                                       |
| XX   |   |
| CC   | The present invention describes a method for treating a proliferative     |
| CC   | skin or eye disease and scarring. The method involves administering a     |
| CC   | ribozyme (I) which cleaves RNA encoding a cytokine involved in            |
| CC   | inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle          |
| CC   | dependent kinase, growth factor or a reductase, or administering a        |
| CC   | nucleic acid molecule (II) comprising a promoter operably linked to a     |
| CC   | cytokine segment encoding (I). (I) can have antipseoriatric,              |
| CC   | dermatological, cytosatic, antiseborrheic, antidiabetic, antisickling,    |
| CC   | ophthalmological, vulnery, keratolytic and virucide activities, and       |
| CC   | cleaves RNA encoding cytokine involved in inflammation. (I) can be used   |
| CC   | in gene therapy. (I) and (II) are useful for treating proliferative skin  |
| CC   | diseases such as psoriasis, atopic dermatitis, actinic keratosis,         |
| CC   | squamous or basal cell carcinoma and viral or seborrheic wart. They can   |
| CC   | also be used for treating proliferative eye diseases such as diabetic     |
| CC   | retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of   |
| CC   | prematurity and retinal detachment, and for treating and preventing       |
| CC   | scarring such as keloid, adhesion and hypertrophic or hypertrophic burn   |
| CC   | scar. AAH57577 to AAH62099 represent sequences used in the                |
| CC   | exemplification of the present invention                                  |
| XX   |   |
| SQ   | Sequence 19 BP; 6 A; 5 C; 3 G; 5 T; 0 U; 0 Other;                         |
|  |   |
| Query Match 0.8%; Score 13.8; DB 1; Length 19;           |   |
| Best Local Similarity 88.2%; Pred. No. 8.2e-02;          |   |
| Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps |   |
| QY   | 1022 TCACGCTGGCTGACTTT 1038   |
|  |   |
| DB   | 3 TCACGCTAGCAGACTTT 19  |
|  |   |
| RESULT 1012  |   |
| AAH58182   |   |
| ID   | AAH58182 standard; DNA; 19 BP.  |
| XX   |   |
| AC   | AAH58182;   |
| XX   |   |
| DT   | 10-SEP-2001 (first entry)   |
| DE   |   |
| XX   | Cell-cycle dependent kinase cdk6 ribozyme binding site SEQID NO:606.      |

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XX KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX DE recognition site; target; ribozyme binding site; eye disease; vulnery;
XX KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
XX KW antisklicking; ophthalmological; keratolytic; gene therapy; viral wart;
XX KW basal cell carcinoma; actinic keratosis; squamous cell carcinoma;
XX KW sickle cell retinopathy; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO200130362-A2.
XX PD 03-MAY-2001.
XX PF 26-OCT-2000; 2000WO-US029500.
XX PR 26-OCT-1999; 99US-0161532P.
XX PA (IMMU-) IMMUSOL INC.
XX PI Robbins JM, Tritz R;
XX PF 2001-300427/31.
XX DR
XX PT Treating proliferative skin or eye diseases and scarring, using ribozymes
XX PT that cleave RNA encoding cytokines involved in inflammation, matrix
XX PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX PS Example 1; Page 116; 408pp; English.
XX CC The present invention describes a method for treating a proliferative
XX CC skin or eye disease and scarring. The method involves administering a
XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX CC dependent kinase, growth factor or a reductase, or administering a
XX CC nucleic acid molecule (II) comprising a promoter operably linked to a
XX CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisklicking,
XX CC ophthalmological, vulnery, keratolytic and virucide activities, and
XX CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin
XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX CC also be used for treating proliferative eye diseases such as diabetic
XX CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX CC prematurity and retinal detachment, and for treating and preventing
XX CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX CC scar. AAH57577 to AAH62099 represent sequences used in the
XX CC exemplification of the present invention.
XX SQ Sequence 19 BP; 3 A; 3 C; 7 G; 6 T; 0 U; 0 Other;
    Query Match 0.8%; Score 13.8; DB 1; Length 19;
    Best Local Similarity 88.2%; Pred. No. 8.2e+02;
    Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1159 TGGGCTGTGGGCTGCAT 1175
    ||| ||||| |||||
Db 2 TGGAGTGTGGGCTGCAT 18
    ||| ||||| |||||
RESULT 1013
AAH57891
ID AAH57891 standard; DNA; 19 BP.
XX AAH57891;
XX AC
XX AC
XX DT 10-SEP-2001 (first entry)

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XX DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:315.
XX KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX DE recognition site; target; ribozyme binding site; eye disease; vulnery;
XX KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
XX KW antisklicking; ophthalmological; keratolytic; gene therapy; viral wart;
XX KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX KW sickle cell retinopathy; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO200130362-A2.
XX PD 03-MAY-2001.
XX PF 26-OCT-2000; 2000WO-US029500.
XX PR 26-OCT-1999; 99US-0161532P.
XX PA (IMMU-) IMMUSOL INC.
XX PI Robbins JM, Tritz R;
XX PF 2001-300427/31.
XX DR
XX PT Treating proliferative skin or eye diseases and scarring, using ribozymes
XX PT that cleave RNA encoding cytokines involved in inflammation, matrix
XX PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX PS Example 1; Page 94; 408pp; English.
XX CC The present invention describes a method for treating a proliferative
XX CC skin or eye disease and scarring. The method involves administering a
XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX CC dependent kinase, growth factor or a reductase, or administering a
XX CC nucleic acid molecule (II) comprising a promoter operably linked to a
XX CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisklicking,
XX CC ophthalmological, vulnery, keratolytic and virucide activities, and
XX CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin
XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX CC also be used for treating proliferative eye diseases such as diabetic
XX CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX CC prematurity and retinal detachment, and for treating and preventing
XX CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX CC scar. AAH57577 to AAH62099 represent sequences used in the
XX CC exemplification of the present invention.
XX SQ Sequence 19 BP; 4 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
    Query Match 0.8%; Score 13.8; DB 1; Length 19;
    Best Local Similarity 88.2%; Pred. No. 8.2e+02;
    Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 760 TCCTGCTCAAGGACCT 776
    ||| ||||| |||||
Db 2 TCGTGTCTCAAGGACT 18
    ||| ||||| |||||
RESULT 1014
AAH57910
ID AAH57910 standard; DNA; 19 BP.
XX AAH57910;
XX AC
XX AC
XX DT 10-SEP-2001 (first entry)

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XX 10-SEP-2001 (first entry)
XX Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:334.
XX
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulnery;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
XX antiskinning; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX WO200130362-A2.
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX 26-OCT-1999; 99US-0161532P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
XX WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX that cleave RNA encoding cytokines involved in inflammation, matrix
XX metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 96; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antiskinning,
XX ophthalmological, vulnery, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX prematurity and retinal detachment, and for treating and preventing
XX scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX scar. AAH57577 to AAH62099 represent sequences used in the
XX exemplification of the present invention
XX
XX Sequence 19 BP; 2 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.8; DB 1; Length 19;
XX Best Local Similarity 88.2%; Pred. No. 8.2e+02;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 919 TTCCTGTTCCAGTGTCT 935
XX
XX Db 3 TACCTCTTCCAGTGTCT 19
XX
XX RESULT 1015
XX AAH58049
XX ID AAH58049 standard; DNA; 19 BP.
```

```
XX AAH58049;
XX
XX 10-SEP-2001 (first entry)
XX
XX Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:473.
XX
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulnery;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
XX antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
XX antiskinning; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX WO200130362-A2.
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX 26-OCT-1999; 99US-0161532P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
XX WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX that cleave RNA encoding cytokines involved in inflammation, matrix
XX metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 106; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antiskinning,
XX ophthalmological, vulnery, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX prematurity and retinal detachment, and for treating and preventing
XX scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX scar. AAH57577 to AAH62099 represent sequences used in the
XX exemplification of the present invention
XX
XX Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 13.8; DB 1; Length 19;
XX Best Local Similarity 88.2%; Pred. No. 8.2e+02;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1090 GTGACACTGTGTACCG 1106
XX
XX Db 2 GTTACACTGTGTACCG 18
XX
XX RESULT 1016
```



```
AAH57596
ID AAH57596 standard; DNA; 19 BP.
XX
AC AAH57596;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk1 ribozyme binding site SEQ ID NO:20.
XX
DE Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
PF 26-OCT-1999; 99US-0161532P.
XX
PR (IMMU-) IMMUSOL INC.
XX
PA Robbins JM, Tritz R;
XX
PI WPI; 2001-300427/31.
XX
DR Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX
PS Example 1; Page 73; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX ophthalmological, vulnery, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX prematurity and retinal detachment, and for treating and preventing
XX scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX scar. AAH57577 to AAH62099 represent sequences used in the
XX exemplification of the present invention
XX
SQ Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1138 TACTCCACTCAGATGA 1154
Db 1 TACTCCACTCAGAAAGA 17
```

```
AAH57596
ID AAH57596 standard; DNA; 19 BP.
XX
AC AAH57596;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:335.
XX
DE Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
PF 26-OCT-1999; 99US-0161532P.
XX
PR (IMMU-) IMMUSOL INC.
XX
PA Robbins JM, Tritz R;
XX
PI WPI; 2001-300427/31.
XX
DR Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX
PS Example 1; Page 96; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
XX ophthalmological, vulnery, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX prematurity and retinal detachment, and for treating and preventing
XX scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX scar. AAH57577 to AAH62099 represent sequences used in the
XX exemplification of the present invention
XX
SQ Sequence 19 BP; 2 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 919 TTCTGTTCAGCTGCT 935
Db 1 TTCTGTTCAGCTGCT 935
```

Db 2 TACTCTTCCAGCTGCT 18

RESULT 1018  
ABS67829/c  
ID ABS67829 standard; DNA, 19 BP.  
XX AC ABS67829;  
XX XX  
XX DT 29-NOV-2002 (first entry)  
XX DE Human casein kinase 2-alpha prime DNA, PCR primer #2.  
XX DE  
XX DE Human; casein kinase 2-alpha prime; diabetes mellitus;  
KW KW Hyperproliferative disorder; breast cancer; prostate cancer;  
KW KW liver cancer; infection; inflammation; tumour formation; cytostatic;  
KW KW antidiabetic; antiinflammatory; antimicrobial; PCR; primer; ss.  
OS OS Homo sapiens.  
XX OS  
XX PN WO200262951-A2.  
XX XX  
XX PD 15-AUG-2002.  
XX PF  
XX PF 01-FEB-2002; 2002WO-US002772.  
XX PR  
XX PR 08-FEB-2001; 2001US-00780173.  
XX PA (ISIS-) ISIS PHARM INC.  
XX PI  
XX PI McKay R, Freier SM, Wyatt JR;  
XX WPI; 2002-627539/57.  
XX XX  
XX PT New antisense oligonucleotides targeted to nucleic acid encoding casein  
PT PT kinase 2-alpha prime, useful for diagnosing and/or treating a disease or  
PT PT condition associated with expression of casein kinase 2-alpha prime.  
XX XX  
XX PS Example 13; Page 91; 129pp; English.  
XX PS  
XX CC The present invention relates to antisense oligonucleotides and methods  
CC CC for modulating the expression of human or mouse casein kinase 2-alpha  
CC CC prime. The antisense oligonucleotides are useful for inhibiting the  
CC CC expression of casein kinase 2-alpha prime, and for treating diseases or  
CC CC conditions associated with aberrant expression of casein kinase 2-alpha  
CC CC prime. Such diseases include diabetes mellitus, and hyperproliferative  
CC CC disorders (particularly cancers e.g. breast cancer, prostate cancer, or  
CC CC liver cancer). The antisense compounds are also useful for diagnostics,  
CC CC therapeutics, prophylaxis, e.g. to prevent or delay infection,  
CC CC inflammation or tumour formation, as research reagents and kits, and in  
CC CC distinguishing between functions of various members of a biological  
CC CC pathway. The present sequence represents a PCR primer used to amplify DNA  
CC CC encoding human casein kinase 2-alpha prime in the examples of the present  
XX CC invention  
SQ Sequence 19 BP; 1 A; 8 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1364: GACTTGATACGCACGGG 1380  
|||||  
17 GACTGGAAAGCGACGGG 1

Db  
  
RESULT 1019  
AAK98357/c  
ID AAK98357 standard; DNA; 19 BP.  
XX AC  
XX AC AAK98357;  
XX XX  
XX DT 08-MAY-2002 (first entry)

XX Chinese hamster HMG-I(Y) PCR primer;  
XX  
XX Chinese hamster; expression augmenting sequence element; EASE; HMGI(Y);  
KW recombinant protein expression; mammalian host cell; PCR; primer; ss;  
KW high mobility group; nonhistone chromatin protein;  
KW architectural transcription factor.  
XX  
OS Cricetulus griseus.  
XX  
PN US6309841-B1.  
PD 30-OCT-2001.  
PF 12-SEP-2000; 2000US-00660299.  
PR 11-JAN-1996; 9CUS-00586509.  
PR 13-JAN-1997; 9TUS-00785150.  
PR 05-NOV-1999; 99US-00435377.  
PA (IMMV ) IMMUNEX CORP.  
XX  
PI Morris AE, Thomas JN;  
PX WPI; 2002-033281/04.  
DR XX  
DX New expression augmenting sequence elements isolated from a Chinese  
PT hamster ovary cell line improve expression of recombinant proteins in  
PT host mammalian cells.  
PX Example 16; Col 22; 25pp; English.  
CC  
CC The invention comprises Chinese hamster expression augmenting sequence  
CC elements (EASEs; AAK98343-AAK98344) that can be used to improve  
CC expression of recombinant proteins in mammalian host cells. The EASE  
CC sequences of the invention contain numerous binding sites for members of  
CC the HMGI(Y) ("high mobility group") family of nonhistone chromatin  
CC proteins, a group of minor groove-binding architectural transcription  
CC factors which are thought to be involved in the mechanisms by which EASE  
CC sequences improve expression of transgenes. The EASEs of the invention  
CC can also be used in the identification of additional EASE sequences (e.g.,  
CC from other transformed cell lines which exhibit high levels of expression  
CC not attributable to a high gene copy number). Expression of recombinant  
CC therapeutic proteins in mammalian cells is often preferable to expression  
CC in microbial (prokaryotic) cells, since the post-translational  
CC modifications found in mammalian cells are more likely to resemble those  
CC found in a mammal. The present sequence represents a Chinese hamster high  
CC mobility group nonhistone chromatin protein-1(Y) (HMGI-Y) PCR primer,  
CC used in an example of the invention to clone the Chinese hamster HMGI-Y  
CC gene  
XX  
SQ Sequence 19 BP; 2 A; 9 C; 3 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0  
  
QY 390 CTCGGATGAGGTGCAGT 406  
DB |||||  
19 CTCGGAGGAGGAGCAGT 3  
  
RESULT 1020  
ID ABL43700  
AC ABL43700 standard; DNA; 19 BP.  
XX  
XX ABL43700;  
XX  
XX  
DT 11-APR-2002 (first entry)  
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:744.  
XX  
KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;

KW PCR primer; ss.  
 XX Homo sapiens.  
 XX JP2001321190-A.  
 XX 20-NOV-2001.  
 XX 12-MAR-2001; 2001JP-00068285.  
 XX 10-MAR-2000; 2000JP-00066716.  
 XX (RIKA ) RIKAGAKU KENKYUSHO.  
 XX (GENO-) GENCTEX YG.  
 XX WPI; 2002-144136/19.  
 XX Arraying genome clones.  
 XX Claim 4; Page 19; 528pp; Japanese.  
 CC The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the markers is changed so that the same discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. are mixed respectively in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified products; (h) the clones in the multiwell plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL42957 to ABL45322 represent PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention  
 SQ Sequence 19 BP; 5 A; 3 C; 9 G; 2 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 19;  
 Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Qy 874 CTGGATGACTGTGGGA 890  
 Db 1 CTGGAGGACTGAGGGA 17  
 RESULT 1021  
 ABS97865/c  
 ID ABS97865 standard; DNA; 19 BP.  
 XX ABS97865;  
 AC ABS97865;  
 XX 23-DEC-2002 (first entry)  
 XX Human UDP-glucuronosyl transferase 24B gene PCR primer #2.  
 DE Human; ss; primer; cytochrome P450 A1; CYP450A1; UGT2B4; MDR1; PCR;  
 XX cytochrome P450 A2; CYP450A2; cytochrome P450 02E; CYP45002E1; LTF;  
 KW adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR112;  
 KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;  
 KW cyclooxigenase 2; COX2; diazepam binding inhibitor; DBI; haematological;  
 KW epoxide hydrolase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;  
 KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;  
 KW HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;  
 KW NADPH quinone oxidoreductase 2; NQO2; sulfoltransferase thermolabile; STM;  
 KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;  
 UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA;  
 multidrug resistance 1; lactotransferrin; orphan nuclear receptor;  
 multidrug resistance associated protein 3; cancer; prostate;  
 acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;  
 altered drug metabolism; cardiovascular function; colorectal tumour;  
 central nervous system; pulmonary; immunological.  
 OS Homo sapiens.  
 XX WO200257410-A2.  
 XX 25-JUL-2002.  
 XX 28-NOV-2001; 2001WO-US044838.  
 XX 28-NOV-2000; 2000US-00724389.  
 XX (DNAS-) DNA SCI LAB INC.  
 XX Guida M, Hall J;  
 XX WPI; 2002-698522/75.  
 CC Isolated nucleic acid molecules having polymorphisms in known human genes e.g. cytochrome P450 and cathepsin S useful as genetic linkage markers for locating, identifying and characterizing the genes responsible for disorder-related traits.  
 Example 18; Page 133; 714pp; English.  
 CC This invention relates to the sequence of an isolated nucleic acid molecule comprising at least one base variation from that of a known human cytochrome P450 A1 (CYP450A1), cytochrome P450 A2 (CYP450A2), cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1), aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator (ARNT), cathepsin S (CTSS), cyclooxigenase 2 (COX2), diazepam binding inhibitor (DBI), epoxide hydrolase 2 (EPHX2), 5-lipoxygenase activating protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl transferase (HNMT), NADPH quinone oxidoreductase 2 (NQO2), sulfoltransferase thermolabile (STM), UDP-glucuronosyl transferase 1 (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance protein 3 (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3 (MRP3), orphan nuclear receptor (NR112), or acetylcholine muscarinic receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence. The polymorphisms in the human genes cited in the invention are useful as genetic linkage markers for locating and characterising the genes that are responsible for specific traits within the genome and eventually identifying the genes responsible for a variety of disorder-related traits as a result of their e.g., overexpression, constitutive expression, mutation or underexpression, which may be used in diagnosing and/or treating the disorders. The nucleic acid molecules comprising the polymorphic sequences contained in CYP450A1, CYP450A2, CYP45002E1, ARNT, EPHX2, GST12, NNMT, NQO2, NR112, STM, UGT2B4, UGT2B7, UGT2B15, AHR, MDR1 and/or MDR3 are useful for screening individuals for altered drug metabolism. The polymorphic sequences contained in CYP450A1, CYP450A2, AHR, MDR1 and/or MDR3 may also be used to screen individuals for susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are used to screen for altered cardiovascular function. In COX2 for altered susceptibility to colorectal tumours, in DBI or CHMR1 for altered central nervous system function, in FLAP and HNMT for altered pulmonary, immunological or haematological function, in KLK2 for altered serine protease activity in the prostate, in LTF for altered immunological or haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and peripheral nervous system function. The present sequence represents a PCR primer used to amplify the sequences of the invention  
 SQ Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 13.8; DB 1; Length 19;  
 Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
 Query Match 0.8%; Score 13.8; DB 1; Length 19;  
 Best Local Similarity 88.2%; Pred. No. 8.2e+02;

AC ABL95954;  
XX  
XX 19-JUN-2002 (first entry)  
XX  
XX DE Probe #31 for assaying nucleic acids.  
XX  
XX KW Probe; polymorphism detection; mutation detection; disease diagnosis;  
XX KW microbial identification; ss.  
XX  
XX OS Unidentified.  
XX  
XX PN WO200208414-A1.  
XX  
XX PD 31-JAN-2002.  
XX  
XX PF 27-JUN-2001; 2001WO-IB001147.  
XX  
XX PR 27-JUN-2000; 2000JP-00193133.  
XX PR 03-AUG-2000; 2000JP-00236115.  
XX PR 26-SEP-2000; 2000JP-00292483.  
XX  
XX XX (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.  
XX PA (KANK-) KANKYO ENG CO LTD.  
XX  
XX PI Kurane R, Kanagawa T, Kamagata Y, Torimura M, Kurata S, Yamada K;  
XX PI Yokomaku T;  
XX  
XX DR WPI; 2002-195876/25.  
XX  
XX PT Fluorescently-labeled nucleic acid probes for assaying nucleic acids and  
XX PT their polymorphism and mutation, particularly useful in science and  
XX PT medicine for e.g. analytical applications, disease diagnosis and  
XX PT microbial identification.  
XX  
XX PS Example 41; Page 103; 152pp; Japanese.  
XX  
XX CC The present invention relates to nucleic acid probes, which are useful  
XX CC for assaying nucleic acids by hybridising with a target nucleic acid, in  
XX CC which a single-stranded oligonucleotide is labeled with a fluorescent  
XX CC substance and a quencher in a manner that the fluorescence intensity of  
XX CC the hybridisation reaction system is increased after completion of the  
XX CC hybridisation but no stem loop structure is formed. The probes are useful  
XX CC for assaying nucleic acids and their polymorphism and mutation,  
XX CC particularly useful for e.g. analytical applications, disease diagnosis  
XX CC and microbial identification. The present sequence was used to illustrate  
XX CC the invention  
XX  
XX SQ Sequence 19 BP; 5 A; 5 C; 7 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Cy 1721 GCCATGTTCACTGCC 1737  
||||| ||| |||  
Db 19 GCCATGTGCAGTGCCC 3  
  
RESULT 1024  
ABL95969/c  
ID ABL95969 standard; DNA; 19 BP.  
XX  
XX AC ABL95969;  
XX  
XX DT 19-JUN-2002 (first entry)  
XX  
XX DE Probe #44 for assaying nucleic acids:  
XX KW Probe; polymorphism detection; mutation detection; disease diagnosis;  
XX KW microbial identification; ss.  
XX  
XX OS Unidentified.

PN WO200208414-A1.  
XX  
PD 31-JAN-2002.  
XX  
PF 27-JUN-2001; 2001WO-IB001147.  
XX  
PR 27-JUN-2000; 2000JP-00193133.  
PR 03-AUG-2000; 2000JP-00236115.  
PR 26-SEP-2000; 2000JP-00292483.  
XX  
XX (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.  
PA (KANK-) KANKYO ENG CO LTD.  
XX  
XX Kurane R, Kanagawa T, Kamagata Y, Torimura M, Kurata S, Yamada K;  
PI Yokomaku T;  
XX  
XX WPI; 2002-195876/25.  
XX  
XX Fluorescently-labeled nucleic acid probes for assaying nucleic acids and  
PT their polymorphism and mutation, particularly useful in science and  
PT medicine for e.g. analytical applications, disease diagnosis and  
PT microbial identification.  
XX  
XX Example 42; Page 108; 152pp; Japanese.  
XX  
XX The present invention relates to nucleic acid probes, which are useful  
CC for assaying nucleic acids by hybridising with a target nucleic acid, in  
CC which a single-stranded oligonucleotide is labelled with a fluorescent  
CC substance and a quencher in a manner that the fluorescence intensity of  
CC the hybridisation reaction system is increased after completion of the  
CC hybridisation but no stem loop structure is formed. The probes are useful  
CC for assaying nucleic acids and their polymorphism and mutation.  
CC particularly useful for e.g. analytical applications, disease diagnosis  
CC and microbial identification. The present sequence was used to illustrate  
CC the invention  
XX  
XX Sequence 19 BP; 5 A; 5 C; 7 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1721 GCCATGTTACCTGCC 1737  
DB 19 GCCATGTCAGTGGCC 3  
RESULT 1025  
ABL95961  
ID ABL95961 standard; DNA; 19 BP.  
AC ABL95961;  
XX  
XX 19-JUN-2002 (first entry)  
DT  
DE Probe #38 for assaying nucleic acids.  
XX  
XX Probe; polymorphism detection; mutation detection; disease diagnosis;  
XX microbial identification; ss.  
XX  
XX Unidentified.  
OS  
XX WO200208414-A1.  
PN  
XX 31-JAN-2002.  
PD  
XX 27-JUN-2001; 2001WO-IB001147.  
EF  
XX 27-JUN-2000; 2000JP-00193133.  
PR  
PR 03-AUG-2000; 2000JP-00236115.  
PR  
PR 26-SEP-2000; 2000JP-00292483.  
XX  
XX (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.  
PA

PA (KANK-) KANKYO ENG CO LTD.  
XX  
XX Kurane R, Kanagawa T, Kamagata Y, Torimura M, Kurata S, Yamada K;  
PI Yokomaku T;  
XX  
XX WPI; 2002-195876/25.  
XX  
XX Fluorescently-labeled nucleic acid probes for assaying nucleic acids and  
PT their polymorphism and mutation, particularly useful in science and  
PT medicine for e.g. analytical applications, disease diagnosis and  
PT microbial identification.  
XX  
XX Example 41; Page 103; 152pp; Japanese.  
XX  
XX The present invention relates to nucleic acid probes, which are useful  
CC for assaying nucleic acids by hybridising with a target nucleic acid, in  
CC which a single-stranded oligonucleotide is labelled with a fluorescent  
CC substance and a quencher in a manner that the fluorescence intensity of  
CC the hybridisation reaction system is increased after completion of the  
CC hybridisation but no stem loop structure is formed. The probes are useful  
CC for assaying nucleic acids and their polymorphism and mutation.  
CC particularly useful for e.g. analytical applications, disease diagnosis  
CC and microbial identification. The present sequence was used to illustrate  
CC the invention  
XX  
XX Sequence 19 BP; 2 A; 7 C; 5 G; 5 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 8.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1721 GCCATGTTACCTGCC 1737  
DB 1 GCCATGTCAGTGGCC 17  
RESULT 1026  
ACF62642  
ID ACF62642 standard; DNA; 19 BP.  
XX  
XX ACF62642;  
AC ACF62642;  
XX  
XX 08-OCT-2003 (first entry)  
DT  
DE Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:471.  
XX  
XX Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;  
XX cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;  
XX cytosstatic; PCR primer; ss.  
XX  
XX Synthetic.  
OS  
XX WO2003013534-A2.  
PN  
XX 20-FEB-2003.  
PD  
XX 23-JUL-2002; 2002WO-BF008219.  
XX  
XX 23-JUL-2001; 2001EP-00117608.  
PR  
XX 24-MAY-2002; 2002EP-00011710.  
PR  
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
PA  
XX Heinrich G, Kerb R;  
PI  
XX WPI; 2003-268144/26.  
DR  
XX New use of irinotecan for preparation of compositions for treating cancer  
PT in subject having genome with variant allele comprising cytochrome p450,  
PT subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.  
XX  
XX Disclosure; Page 44; 86pp; English.  
PS  
XX

CC The present invention describes the use of irinotecan (I) or its  
 CC derivative for the preparation of a pharmaceutical composition for  
 CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic  
 CC cancer, or malignant glioma in a subject having a genome with a variant  
 CC allele which comprises a cytochrome p450, subfamily IIIA (nifedipine  
 CC oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have  
 CC cytostatic activity. The therapeutic applications of (I) is improved,  
 CC since it is possible to individually treat a subject with an appropriate  
 CC dosage and/or an appropriate derivative of (I). Therefore, undesirable,  
 CC harmful or toxic effects are efficiently avoided. Unnecessary and  
 CC potentially harmful treatment of those subjects who do not respond to the  
 CC treatment with substances (nonresponders), as well as the development of  
 CC drug resistances due to suboptimal drug dosing can be avoided. ACF62200  
 CC to ACF62751 and ABM34912 to ABM35013 represent sequences used in the  
 CC exemplification of the present invention

XX  
 SQ Sequence 19 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;  
 Best Local Similarity 78.9%; Pred. No. 8.2e+02;  
 Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 388 TCCTCGGATGAGTGCAGT 406  
 ||||| : |||||  
 Db 1 TCCTCTGAGRATGTCAGT 19

## RESULT 1027

ACF62643/C  
 ID ACF62643 standard; DNA; 19 BP.

XX ACF62643;

XX 08-OCT-2003 (first entry)

XX Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:472.

XX Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;  
 XX cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;  
 XX cytostatic; PCR primer; ss.

XX Synthetic.

XX WO2003013534-A2.

XX 20-FEB-2003.

XX 23-JUL-2002; 2002WO-EP008219.

XX 23-JUL-2001; 2001EP-00117608.

XX 24-MAY-2002; 2002EP-00011710.

XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX Heinrich G, Kerb R;

XX WPI; 2003-268144/26.

XX New use of irinotecan for preparation of compositions for treating cancer  
 XX in subject having genome with variant allele comprising cytochrome p450,  
 XX subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.

XX Disclosure; Page 44; 86pp; English.

XX The present invention describes the use of irinotecan (I) or its  
 CC derivative for the preparation of a pharmaceutical composition for  
 CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic  
 CC cancer, or malignant glioma in a subject having a genome with a variant  
 CC allele which comprises a cytochrome p450, subfamily IIIA (nifedipine  
 CC oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have  
 CC cytostatic activity. The therapeutic applications of (I) is improved,  
 CC since it is possible to individually treat a subject with an appropriate  
 CC dosage and/or an appropriate derivative of (I). Therefore, undesirable,

CC harmful or toxic effects are efficiently avoided. Unnecessary and  
 CC potentially harmful treatment of those subjects who do not respond to the  
 CC treatment with substances (nonresponders), as well as the development of  
 CC drug resistances due to suboptimal drug dosing can be avoided. ACF62200  
 CC to ACF62751 and ABM34912 to ABM35013 represent sequences used in the  
 CC exemplification of the present invention

XX Sequence 19 BP; 6 A; 5 C; 4 G; 3 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;

Best Local Similarity 78.9%; Pred. No. 8.2e+02;  
 Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 388 TCCTCGGATGAGTGCAGT 406  
 ||||| : |||||  
 Db 19 TCCTCTGAGRATGTCAGT 1

## RESULT 1028

ADB21313  
 ID ADB21313 standard; DNA; 19 BP.

XX ADB21313;

XX 20-NOV-2003 (first entry)

XX MRP1 based cancer related nucleic acid SEQ ID NO:471.

XX irinotecan; colorectal cancer; cervical cancer; gastric cancer;  
 XX lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;  
 XX variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;  
 XX ds.

XX Unidentified.

XX WO2003013533-A2.

XX 20-FEB-2003.

XX 23-JUL-2002; 2002WO-EP008200.

XX 23-JUL-2001; 2001EP-00117608.

XX 24-MAY-2002; 2002EP-00011710.

XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX Heinrich G, Kerb R;

XX WPI; 2003-354397/33.

XX Use of irinotecan or its derivative for preparation of a pharmaceutical  
 XX composition for treating cancer in a subject having a genome with a  
 XX variant allele comprising a multidrug resistance protein 1  
 XX polynucleotide.

XX Disclosure; Page 54; 100pp; English.

XX The present invention describes a method for the use of irinotecan (I) or  
 CC its derivative for the preparation of a pharmaceutical composition for  
 CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic  
 CC cancer, or malignant glioma in a subject having a genome with a variant  
 CC allele which comprises a multidrug resistance protein 1 (MRP1)  
 CC polynucleotide (II). (I) has cytostatic activity. (I) or its derivative  
 CC can be used for the preparation of a pharmaceutical composition for  
 CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic  
 CC cancer, or malignant glioma in a subject, where the subject is a human  
 CC (preferably African or Asian) or a mouse. The present sequence represents  
 CC a sequence which is used in the exemplification of the present invention.

XX Sequence 19 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;

Best Local Similarity 78.9%; Pred. No. 8.2e+02;

Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCAGT 406  
||||| : |||||  
Db 1 TCCTCTGAGRATGTGCAGT 19

RESULT 1029  
ADB21314/c  
ID ADB21314 standard; DNA; 19 BP.  
XX  
AC ADB21314;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE MRP1 based cancer related nucleic acid SEQ ID NO:472.  
XX  
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;  
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;  
KW variant allele; multidrug resistance protein 1; MRP1; cytosolic; gene;  
ds.  
XX  
XX  
OS Unidentified.  
XX  
PN WO2003013533-A2.  
XX  
PD 20-FEB-2003.  
XX  
PF 23-JUL-2002; 2002WO-EP008200.  
XX  
PR 23-JUL-2001; 2001EP-00117608.  
PR 24-MAY-2002; 2002EP-00011710.  
XX  
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
XX  
PI Heinrich G, Kerb R;  
XX  
WPI; 2003-354397/33.  
XX  
PT Use of irinotecan or its derivative for preparation of a pharmaceutical  
PT composition for treating cancer in a subject having a genome with a  
PT variant allele comprising a multidrug resistance protein 1  
PT polynucleotide.  
XX  
XX Disclosure; Page 54; 100pp; English.  
XX  
CC The present invention describes a method for the use of irinotecan (I) or  
CC its derivative for the preparation of a pharmaceutical composition for  
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic  
CC cancer, or malignant glioma in a subject having a genome with a variant  
CC allele which comprises a multidrug resistance protein 1 (MRP1)  
CC polynucleotide (II). (I) has cytostatic activity. (I) or its derivative  
CC can be used for the preparation of a pharmaceutical composition for  
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic  
CC cancer, or malignant glioma in a subject, where the subject is a human  
CC (preferably African or Asian) or a mouse. The present sequence represents  
CC a sequence which is used in the exemplification of the present invention.  
XX  
SQ Sequence 19 BP; 6 A; 5 C; 4 G; 3 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 78.9%; Pred. NO. 8.2e+02;  
Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCAGT 406  
||||| : |||||  
Db 19 TCCTCTGAGRATGTGCAGT 1

RESULT 1030  
ADB88402  
ID ADB88402 standard; DNA; 19 BP.  
XX

ADB88402; AC  
XX  
DT 04-DEC-2003 (first entry)  
XX  
DE Human UGT1A1 variant allele sequence fragment SEQ ID NO:443.  
XX  
KW ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;  
KW colorectal cancer; cervical cancer; gastric cancer; lung cancer;  
KW ovarian cancer; pancreatic cancer; malignant glioma;  
KW uridine diphosphate glycosyltransferase1 member A1.  
XX  
OS Homo sapiens.  
XX  
PN WO2003013536-A2.  
XX  
PD 20-FEB-2003.  
XX  
PF 23-JUL-2002; 2002WO-EP008217.  
XX  
PR 23-JUL-2001; 2001EP-00117608.  
PR 24-MAY-2002; 2002EP-00011710.  
XX  
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
XX  
PI Heinrich G, Kerb R;  
XX  
WPI; 2003-289896/28.  
XX  
PT Use of irinotecan to treat cancer patient by determining if patient has  
PT variant alleles of UGT1A1 gene, administering increased/decreased amounts  
PT of irinotecan based on increased/decreased levels of UGT1A1 gene product.  
XX  
PS Disclosure; Page 58; 107pp; English.  
XX  
CC The invention relates to the novel use of irinotecan to treat a patient  
CC suffering from cancer. This involves determining if the patient has one  
CC or more variant alleles of the UGT1A1 gene, and if the patient has one or  
CC more of such variant alleles, irinotecan is administered in an increased  
CC or decreased amount in comparison to the amount that is administered  
CC without regard to the patient's alleles in the UGT1A1 gene. The invention  
CC has cytostatic activity. A composition of the invention acts as a  
CC topoisomerase I inhibitor. The method is useful for treating a patient,  
CC an animal e.g. mouse or a human, preferably African or Asian, suffering  
CC from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,  
CC pancreatic cancer or malignant glioma. The present sequence is used in  
CC the exemplification of the invention.  
XX  
SQ Sequence 19 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 78.9%; Pred. NO. 8.2e+02;  
Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 388 TCCTCGGATGAGTGCAGT 406  
||||| : |||||  
Db 1 TCCTCTGAGRATGTGCAGT 19

RESULT 1031  
ADB88403/c  
ID ADB88403 standard; DNA; 19 BP.  
XX  
AC ADB88403;  
XX  
DT 04-DEC-2003 (first entry)  
XX  
DE Human UGT1A1 variant allele sequence fragment SEQ ID NO:444.  
XX  
KW ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;  
KW colorectal cancer; cervical cancer; gastric cancer; lung cancer;  
KW ovarian cancer; pancreatic cancer; malignant glioma;  
KW uridine diphosphate glycosyltransferase1 member A1.  
XX





CC The invention relates to the novel use of irinotecan or its derivative  
CC for the preparation of pharmaceutical compositions for treating  
CC colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or  
CC malignant glioma in a subject having a genome with a variant allele which  
CC comprises a multidrug resistance 1 (MDR1) polynucleotide. A composition  
CC of the invention has cytostatic activity. The invention is useful for the  
CC preparation of pharmaceutical compositions for treating colorectal,  
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant  
CC glioma in a subject (preferably human, more preferably African or Asian)  
CC or a mouse. The present sequence is used in the exemplification of the  
CC invention.  
XX  
SQ Sequence 19 BP; 6 A; 5 C; 4 G; 3 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 78.9%; Pred. No. 8.2e+02;  
Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

OY 388 TCCTCGGATGAGTGCAGT 406  
Db 19 TCCTCTGAGRATGTCAGT 1  
||||| : |||||  
||||| : |||||

RESULT 1034  
ADB92576  
ID ADB92576 standard; DNA; 19 BP.  
XX  
AC ADB92576;  
XX  
DT 04-DEC-2003 (first entry)  
XX  
DE Human MDR1 variant allele sequence fragment SEQ ID NO:471.

XX  
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;  
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;  
KW multidrug resistance 1; MDR1; cytostatic; ds; human; UGT1A1; MRP1; TOP1.

XX Homo sapiens.  
XX  
PN WO2003013535-A2.  
XX  
PD 20-FEB-2003.

XX 23-JUL-2002; 2002WO-EP008220.

XX 23-JUL-2001; 2001EP-00117608.

PR 24-MAY-2002; 2002EP-00011710.

XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX Heinrich G, Kerb R;

XX WPI; 2003-342400/32.

XX New use of irinotecan for preparation of pharmaceutical compositions for  
XX treating cancer in subject having genome with variant allele comprising  
XX multidrug resistance 1 polynucleotide.

XX Disclosure; Page 54; 104pp; English.

XX The invention relates to a novel use of irinotecan or its derivative for  
XX the preparation of a pharmaceutical composition for treating colorectal,  
XX cervical, gastric, lung, ovarian or pancreatic cancer, or malignant  
XX glioma in a subject having a genome with a variant allele which comprises  
XX a multidrug resistance 1 (MDR1) polynucleotide. A composition of the  
XX invention has cytostatic activity. The present sequence is used in the  
XX exemplification of the invention.

XX Sequence 19 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 78.9%; Pred. No. 8.2e+02;  
Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

OY 388 TCCTCGGATGAGTGCAGT 406  
Db 1 TCCTCTGAGRATGTCAGT 19  
||||| : |||||  
||||| : |||||

RESULT 1035  
ADB92577/c  
ID ADB92577 standard; DNA; 19 BP.  
XX  
AC ADB92577;  
XX  
DT 04-DEC-2003 (first entry)  
XX  
DE Human MDR1 variant allele sequence fragment SEQ ID NO:472.

XX irinotecan; colorectal cancer; cervical cancer; gastric cancer;  
XX lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;  
XX multidrug resistance 1; MDR1; cytostatic; ds; human; UGT1A1; MRP1; TOP1.

XX Homo sapiens.

XX WO2003013535-A2.

XX 20-FEB-2003.

XX 23-JUL-2002; 2002WO-EP008220.

XX 23-JUL-2001; 2001EP-00117608.

PR 24-MAY-2002; 2002EP-00011710.

XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX Heinrich G, Kerb R;

XX WPI; 2003-342400/32.

XX New use of irinotecan for preparation of pharmaceutical compositions for  
XX treating cancer in subject having genome with variant allele comprising  
XX multidrug resistance 1 polynucleotide.

XX Disclosure; Page 54; 104pp; English.

XX The invention relates to a novel use of irinotecan or its derivative for  
XX the preparation of a pharmaceutical composition for treating colorectal,  
XX cervical, gastric, lung, ovarian or pancreatic cancer, or malignant  
XX glioma in a subject having a genome with a variant allele which comprises  
XX a multidrug resistance 1 (MDR1) polynucleotide. A composition of the  
XX invention has cytostatic activity. The present sequence is used in the  
XX exemplification of the invention.

SQ Sequence 19 BP; 6 A; 5 C; 4 G; 3 T; 0 U; 1 Other;  
Query Match 0.8%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 78.9%; Pred. No. 8.2e+02;  
Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

OY 388 TCCTCGGATGAGTGCAGT 406  
Db 19 TCCTCTGAGRATGTCAGT 1  
||||| : |||||  
||||| : |||||

RESULT 1036  
ADD89803/c

ID ADD89803 standard; DNA; 19 BP.

XX  
AC ADD89803;

XX 29-JAN-2004 (first entry)

XX Hamster high mobility group; HMG-I(Y), RT-PCR primer.

XX Hamster; high mobility group; HMG-I(Y); ss; primer;

KW expression augmenting sequence element; EASE; RT-PCR;  
XX reverse transcriptase PCR; PCR.

OS Cricetulus griseus.

XX US2003008345-A1.

XX 09-JAN-2003.

XX 09-OCT-2001; 2001US-00973928.

XX 11-JAN-1996; 96US-00586509.

XX 13-JAN-1997; 97US-00785150.

XX 05-NOV-1999; 99US-00435377.

XX 02-MAR-2000; 2000US-0186537P.

XX 12-SEP-2000; 2000US-00660299.

XX (MORRIS/) MORRIS A E.

XX (THOM/) THOMAS J N.

XX Morris AE, Thomas JN;

XX WPI; 2003-863362/80.

XX Example 16; Page 13; 27pp; English.

XX The invention relates to an isolated polynucleotide comprising a nucleic  
CC acid molecule comprising nucleotides 11538-11692, nucleotides 11538-  
CC 11760, nucleotides 11673-12165, nucleotides 11813-12165 or nucleotides  
CC 11899-12165 of ADD89798, the hamster high mobility group, HMG-I(Y) gene,  
CC fragments of the DNA having expression augmenting activity (an expression  
CC augmenting sequence element, EASE) or their combinations or complementary  
CC DNA. Also included are a mammalian host cell which comprises the  
CC polynucleotide, and production of a recombinant protein which comprises  
CC culturing the cell under conditions promoting expression of the protein.  
CC The polynucleotides are used for production of recombinant protein,  
CC particularly in eukaryotic cells for research and therapeutic  
CC applications. The method is also used for identifying expression  
CC augmenting sequence elements e.g. from other transformed cell lines. High  
CC expression of recombinant proteins is facilitated in a short period. The  
CC present sequence is a reverse transcriptase (RT)-PCR primer used to  
CC isolate the hamster HMG-I(Y) cDNA.

XX SQ Sequence 19 BP; 2 A; 9 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;

Best Local Similarity 88.2%; Pred. No. 8.2e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 390 CTCGGATGAGTGCAGT 406

Db 19 CTCGAGGAGGAGCAGT 3

RESULT 1037

ADE27518

ID ADE27518 standard; RNA; 19 BP.

XX ADE27518;

XX 29-JAN-2004 (first entry)

XX Stearoyl-CoA desaturase siNA oligonucleotide SEQ ID NO:462.

XX short interfering nucleic acid; siNA; downregulation; inhibition; SCD;  
XX stearyl-CoA desaturase; RNA interference; anorectic; antidiabetic;  
XX antiarteriosclerotic; cytosolic; virucide; obesity; diabetes;  
XX atherosclerosis; cancer; viral infection; drug screening;  
XX genetic engineering; pharmacogenomic; gene mapping; ss.

OS Synthetic.

XX WO2003070885-A2.

XX 28-AUG-2003.

XX 13-FEB-2003; 2003WO-US004317.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 05-JUN-2002; 2002US-0366782P.

XX 23-AUG-2002; 2002US-0405784P.

XX 05-SEP-2002; 2002US-0408378P.

XX 09-SEP-2002; 2002US-0409293P.

XX 12-SEP-2002; 2002US-0412304P.

XX 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX McSwiggen J, Beigelman L, Thompson J;

XX WPI; 2003-721697/68.

XX Example 3; SEQ ID NO 462; 139pp; English.

XX The present invention describes a short interfering nucleic acid (siNA)  
CC that downregulates expression of the SCD (stearoyl-CoA desaturase) gene  
CC by RNA interference. Also described: (1) modulating expression of SCD  
CC genes in cells, tissue explants or organisms by introduction of siNA; (2)  
CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or  
CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting  
CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and  
CC virucide activities. The siNAs can be used to modulate expression of SCD  
CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;  
CC diabetes (types I and II); atherosclerosis; cancer and viral infections.  
CC They can also be used for drug screening; diagnosis; target  
CC identification and validation; genetic engineering; pharmacogenomics;  
CC studying gene function and gene mapping (e.g. of single-nucleotide  
CC polymorphisms). The present sequence represents an SCD siNA, which is  
CC used in the exemplification of the present invention.

XX SQ Sequence 19 BP; 5 A; 3 C; 8 G; 0 T; 3 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;

Best Local Similarity 76.5%; Pred. No. 8.2e+02;

Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Oy 1085 AGGTGGTGACACTGTGG 1101

Db 2 AGGUGGAGACACUGCG 18

RESULT 1038

ADE27228/c

ID ADE27228 standard; RNA; 19 BP.

XX ADE27228;

XX 29-JAN-2004 (first entry)

XX Stearoyl-CoA desaturase siNA oligonucleotide SEQ ID NO:172.

XX short interfering nucleic acid; siNA; downregulation; inhibition; SCD;  
XX stearyl-CoA desaturase; RNA interference; anorectic; antidiabetic;  
XX antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;  
XX atherosclerosis; cancer; viral infection; drug screening;  
XX genetic engineering; pharmacogenomic; gene mapping; ss.

OS Synthetic.

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XX PN WO2003070885-A2.
XX PD 28-AUG-2003.
XX PF 13-FEB-2003; 2003WO-US004317.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 20-SEP-2002; 2002US-0412304P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Meswiggen J, Beigelman L, Thompson J;
XX PR WPI; 2003-721687/68.
XX DR New short interfering nucleic acid, useful e.g. for treatment and
XX PT diagnosis of obesity or diabetes, downregulates expression of the
XX PT stearyl-CoA desaturase gene.
XX PR Example 3; SEQ ID NO 172; 139pp; English.
XX CC The present invention describes a short interfering nucleic acid (siNA)
XX CC that downregulates expression of the SCD (stearyl-CoA desaturase) gene
XX CC by RNA interference. Also described: (1) modulating expression of SCD
XX CC genes in cells, tissue explants or organisms by introduction of siNA; (2)
XX CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
XX CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
XX CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
XX CC virucide activities. The siNAs can be used to modulate expression of SCD
XX CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
XX CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
XX CC They can also be used for drug screening; diagnosis; target
XX CC identification and validation; genetic engineering; pharmacogenomics;
XX CC studying gene function and gene mapping (e.g. of single-nucleotide
XX CC polymorphisms). The present sequence represents an SCD siNA, which is
XX CC used in the exemplification of the present invention.
XX SQ Sequence 19 BP; 3 A; 8 C; 3 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 8.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1085 AGGTGGTGACACTGTGG 1101
Db ||||| ||||| |||||
18 AGGTGGAGACACTGCGG 2

RESULT 1039
AAQ15432/c
ID AAQ15432 standard; RNA; 20 BP.
AC AAQ15432;
XX 21-APR-1994 (first entry)
XX HPV-16 control primer dt1.
XX Human papillomavirus; amplification; primer; polymerase chain reaction;
XX PCR; ss.
XX Synthetic.
XX EP415755-A.
XX 06-MAR-1991.
XX 30-AUG-1990; 90EP-00309492.
XX 01-SEP-1989; 89US-00401840.
XX (LIFE-) LIFE TECHN INC.
XX WPI; 1991-067289/10.
XX Avoiding contamination during nucleic acid amplification - using
XX oligo:nucleotide primer contg. unnatural bases which can be selectively
XX rendered incapable of further amplification.
XX Example 1; Pag 7; 10pp; English.
XX Example 1 describes the amplification of HPV-16 DNA by PCR using the
XX primers given in AAQ15430-31 or AAQ15432-33
XX Sequence 20 BP; 2 A; 2 C; 7 G; 0 T; 9 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 8.6e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1308 CAAGACATCAACTACC 1324
Db ||||| ||||| |||||
17 CAAGACATCACTGACC 1

RESULT 1040
AAQ15430/c
ID AAQ15430 standard; RNA; 20 BP.
AC AAQ15430;
XX 21-APR-1994 (first entry)
XX HPV-16 primer dU1.
XX Human papillomavirus; amplification; primer; polymerase chain reaction;
XX PCR; ss.
XX Synthetic.
XX EP415755-A.
XX 06-MAR-1991.
XX 30-AUG-1990; 90EP-00309492.
XX 01-SEP-1989; 89US-00401840.
XX (LIFE-) LIFE TECHN INC.
XX WPI; 1991-067289/10.
XX Avoiding contamination during nucleic acid amplification - using
XX oligo:nucleotide primer contg. unnatural bases which can be selectively
XX rendered incapable of further amplification.
XX Example 1; Pag 7; 10pp; English.
XX Example 1 describes the amplification of HPV-16 DNA by PCR using the
XX primers given in AAQ15430-31 or AAQ15432-33
XX Sequence 20 BP; 2 A; 2 C; 7 G; 0 T; 9 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 8.6e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1308 CAAGACATCAACTACC 1324
Db ||||| ||||| |||||

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Db 17 CAAGACATACATCGACC 1

## RESULT 1041

AAQ58627  
ID AAQ58627 standard; DNA; 20 BP.

XX AC AAQ58627;  
XX AC

DT 25-MAR-2003 (revised)  
DT 23-APR-1994 (first entry)

XX AC  
XX AC

DE HPV-6 probe.

XX Human papillomavirus; HPV; amplification; primer;  
KW polymerase chain reaction; PCR; antibody; assay; nitrocellulose filter;  
KW ss.

XX Synthetic.

XX FR2660925-A.  
XX PN

XX 18-OCT-1991.  
XX PD

XX 11-APR-1990; 90FR-00004659.  
XX PF

XX 11-APR-1990; 90FR-00004659.  
XX PR

XX (INRM ) INSERM INST NAT SANTE & RECH MED.  
XX PA

XX Tchen P, Vautherot JF;  
XX PI

XX WPI; 1992-001368/01.  
XX DR

XX Fixing nucleotide sequence to solid support, e.g. nylon filter - using  
PT antibody specific for subtit. on the sequence as intermediate protein,  
PT useful e.g. in pathogen typing.

XX Disclosure; Page 14; 20pp; French.  
XX PS

XX The use of probes fixed by antibodies to nitrocellulose filters was  
CC exemplified in an assay for HPV. The probes are given in AAQ58627-  
CC AAQ58630 and the primers are given in AAQ58631-Q58634. (Updated on 25-MAR  
CC -2003 to correct PA field.)

XX Sequence 20 BP; 5 A; 8 C; 1 G; 6 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 8.6e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1677 CCCCACTACATCTTCC 1693

Db 4 CCGTACTACATCTTCC 20

## RESULT 1042

AAQ34599/c  
ID AAQ34599 standard; DNA; 20 BP.

XX AC AAQ34599;  
XX AC

DT 25-MAR-2003 (revised)  
DT 10-MAY-1993 (first entry)

XX AC  
XX DE Human papilloma virus type 16 PCR primer.

XX Polymerase chain reaction; HPV 16; amplification; ss.  
KW

XX Synthetic.  
OS

XX EP522884-A1.  
XX FN

PD 13-JAN-1993.

XX 13-JUL-1992; 92EP-00306396.

XX 12-JUL-1991; 91US-00728874.

XX (LIFE-) LIFE TECHNOLOGIES INC.  
XX PA

XX Hartley JL, Berninger M;  
XX PI

XX WPI; 1993-010692/02.  
XX DR

XX Oligo:nucleotide-dependent amplification for controlling contamination of  
PT prod - by incorporating an exo-sample nucleotide into products.

XX Example; Page 10; 18pp; English.  
XX PS

XX The sequence is that of a PCR primer used in the amplification of a  
CC region of the human papilloma virus type 16 (HPV 16) DNA. (Updated on 25-  
CC MAR-2003 to correct PN field.)

XX Sequence 20 BP; 2 A; 2 C; 7 G; 9 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 8.6e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1308 CAAGACATACATCTTCC 1324  
Db 17 CAAGACATACATCTTCC 1

## RESULT 1043

AAQ34982/c  
ID AAQ34982 standard; DNA; 20 BP.

XX AC AAQ34982;  
XX AC

DT 25-MAR-2003 (revised)  
DT 26-MAY-1993 (first entry)

XX PCR primer PV3 (5').  
XX DB

XX Amplification; cervical cancer; HPV-16; human papillomavirus; ss.  
XX KW

XX Synthetic.  
XX OS

XX EP524808-A2.  
XX PN

XX 27-JAN-1993.  
XX PD

XX 22-JUL-1992; 92EP-00306701.  
XX PF

XX 23-JUL-1991; 91US-00733419.  
XX PR

XX (HOFF ) HOFFMANN LA ROCHE & CO AG F.  
XX PA (UYNF ) UNIV NEW YORK STATE RES FOUND.

XX Bloch W, Nuovo GJ;  
XX PI

XX WPI; 1993-028856/04.  
XX DR

XX Compens. for in situ polymerase chain reaction on fixed cells - involves  
PT preventing reaction until start of thermal cycling, and providing higher  
PT sensitivity and selectivity.

XX Example 1; Page 10; 14pp; English.  
XX PS

XX The PCR primer PV3(5') correspond to an oligomer starting at nucleotide  
CC 501 of human papillomavirus type 16. The primer is used to demonstrate a  
CC novel in situ PCR method comprising fixed cells, a subset of PCR reagents  
CC and opt. a binding protein for single stranded DNA, or fixed cells, a  
CC complete set of PCR reagents and the binding protein. The method is used